Wellbeing and Vitality in Education: the story of WAVE



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Te Pae Māhutonga graphics courtesy of Healthy Christchurch.













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Executive Summary

WAVE stands for 'Well-being and Vitality in Education', South Canterbury's health promotion in education programme. Using the whole school approach to health promotion, WAVE has established enduring partnerships with preschools, kindergartens, playcentres, primary and secondary schools, and tertiary training providers over 16 years.

The purpose of this summary document is to take stock of WAVE's current health promotion work in the context of the 2022 New Zealand health reforms. This summary of 'the story of WAVE' explains what WAVE is and highlights the successes of WAVE and the lessons learned that can help strengthen health promotion delivery within a new National Public Health Service.

With the vision of "supporting our children and young people to learn well and be well", WAVE works in partnership with all education settings in the South Canterbury rohe (region), from early childhood education to tertiary providers. WAVE works with the project partner organisations of Te Whatu Ora/Health NZ, Te Rūnanga o Arowhenua, education representatives and networks (ECE leaders' group, Kāhui Ako), Sport Canterbury and other NGOs.

Based on the Health Promoting Schools framework, grounded in Te Pae Mahutonga and the Ottawa Charter, and with regular evaluation, WAVE enables education settings to implement their own health promotion. The WAVE team and WAVE process provide consistent support to education: the WAVE facilitator maintains the key relationship with education settings, supports their development of approaches to promote the health and wellbeing of staff and students, advocates for and supports inclusion of Māori values and practices, and works in collaboration with key partners and community groups to help preschools, kindergartens, playcentres, primary and secondary schools, and tertiary training providers meet their health and wellbeing goals.

WAVE evaluations have consistently highlighted the following crucial success factors:

- WAVE's relationship with education settings is proactive, consistent, and keeps health and wellbeing part of regular conversation;
- WAVE focuses on Māori health and reducing inequity in health and education;
- WAVE is specific to South Canterbury, has local knowledge of the area and people, and is able to tailor health promotion to local needs;
- WAVE is a credible source of health resources and links.

Participants in WAVE evaluations have commented that 'WAVE is a catalyst for health and education working together', a phrase that summarises the goal, story and value of the WAVE project in South Canterbury.

Introduction

WAVE stands for 'Well-being and Vitality in Education', South Canterbury's health promotion in education programme.

WAVE was developed in 2006 by Community and Public Health (CPH) and the South Canterbury District Health Board (SCDHB). Focusing on children, young people and their families, WAVE extended the principles of the *Health Promoting Schools* framework into early childhood education and tertiary settings. Beginning as a 5-year investment into children and young people in the South Canterbury region, WAVE has continued health promotion in preschools, kindergartens, playcentres, primary and secondary schools, and tertiary training providers for over 16 years.

Purpose

The purpose of this summary document is to take stock of WAVE's current health promotion work in the context of the 2022 health reforms in New Zealand. This summary of 'the story of WAVE' explains what WAVE is and highlights the successes of WAVE and the lessons learned that can help strengthen health promotion delivery in the new National Public Health Service.

WAVE background

History & origins of WAVE

The South Canterbury Child and Youth Health Project, now called Wellbeing and Vitality in Education (WAVE), was established initially as a 5-year project commencing July 2006 to June 2011¹.

The South Canterbury Child and Youth Health Project was based on the commitment of South Canterbury District Health Board (SCDHB), Community and Public Health (CPH), Te Runanga o Arowhenua, the Ministry of Education, and Sport South Canterbury, to create healthier environments for children and young people. An evidence report was commissioned in 2005² to inform the development of WAVE, and SCDHB and CPH jointly developed a proposal for building on work already being undertaken in this field, with both organisations committing health promotion resources to the project.

WAVE's funding has been provided through the partnership between SCDHB and CPH. In 2022, the health reforms moved the 12 separate DHBs into one organisation, Te Whatu Ora - Health NZ, and the public health units into a National Public Health Service (NPHS), also within Te Whatu Ora. SCDHB is now Te Whatu Ora South Canterbury, and CPH has maintained its name of Te Mana Ora, Community and Public Health.

WAVE Foundation and Models

Te Tiriti o Waitangi is the founding document of New Zealand. As such, WAVE commits to honouring Te Tiriti o Waitangi, working in a way that acknowledges and respects the Māori worldview in advocating for and enabling Māori to succeed as Māori. The primary health promotion model that WAVE applies is Te Pae Māhutonga³, developed by Sir Mason Durie, which describes six key aspects of health promotion:

Mauriora - access to the Māori world

¹ Community and Public Health. (2006). South Canterbury Child and Youth Health Promotion - a Proposal. Community and Public Health, South Canterbury.

² Community and Public Health. (2006). Child and Youth Health Promotion Interventions and Effectiveness: A reference document for South Canterbury. Community and Public Health, Christchurch.

³ Durie M. (1999). Te Pae Māhutonga: A Model for Māori Health Promotion. Health Promotion Forum of New Zealand Newsletter. Accessed via www.cph.co.nz/about-us/te-pae-mahutonga/

- Waiora environmental protection
- Toiora healthy lifestyles
- Te Oranga participation in society
- Ngā Manukura leadership
- Te Mana Whakahaere autonomy

Te Whare Tapa Whā, another holistic model of wellbeing that education settings frequently use, is commonly used in WAVE's health promotion.

WAVE is based on an expanded *Health Promoting Schools*⁴ model; whereas Health Promoting Schools is focused at Primary and Secondary school environments, WAVE includes Early Childhood Education and Tertiary settings to cover the full range of education available in South Canterbury. Health Promoting Schools and WAVE are based on best practice health promotion rooted in the Ottawa Charter⁵.

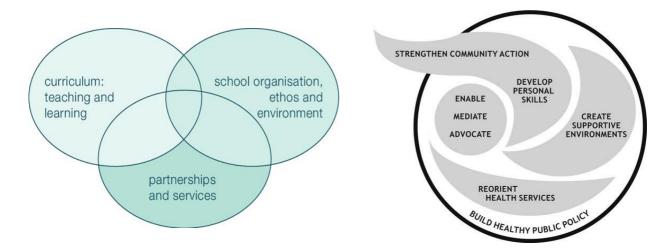


Figure 1: The Health Promoting Schools Framework (left) and The Ottawa Charter for health promotion (right)

WAVE in Action

Rationale for Health Promotion centred on children and young people in education

WAVE's outline and induction information⁶ provides the following rationale for health promotion in education.

"The places that we live, work, study and play have a huge influence on our health and wellbeing. This is never more profound than it is with education settings. Tamariki and rangatahi health and wellbeing are shaped by these environments. In particular, health and wellbeing have a well-recognised impact on learning outcomes.

Childhood is a time of rapid growth and development, and good health in childhood is strongly linked with positive health outcomes later in life. Health and well-being also influence other areas of a child or young person's life, including whether they are able to achieve to their full educational potential. "

The WAVE team supports South Canterbury early childhood education (ECE), primary and secondary schools, and tertiary education providers to implement health promotion using a whole school/setting approach. The logic framework for WAVE is included in Appendix i of this summary.

⁴ The International Union for Health Promotion and Education (IUHPE). (2010). Promoting Health in Schools: From Evidence to Action. IUHPE https://www.iuhpe.org/images/PUBLICATIONS/THEMATIC/HPS/Evidence-Action ENG.pdf

⁵ World Health Organization. (1986). The Ottawa Charter for Health Promotion. Geneva, Switzerland: WHO; 1986. Available from: http://www.who.int/healthpromotion/conferences/previous/ottawa/en/index.html.

⁶ Community and Public Health. (2020). The WAVE Source Document. Community and Public Health, South Canterbury.

Goals

WAVE has a stated vision of 'supporting our children and young people to learn well and be well'.

The current WAVE goals are to:

- Reduce inequities in health and education
- Support young people and their families in developing healthy behaviours
- Support education environments that raise students' achievement where tamariki and rangatahi can thrive

The aims of WAVE are to:

- Support young people and their families in developing healthy behaviours
- Support settings to develop sustainable approaches to promoting the health and well-being of staff and students
- Help raise students' achievement in education
- Work in collaboration with key partners and community groups to meet the needs of the settings
- Reduce health inequalities
- Support Māori cultural values and practices for improved outcomes for tamariki, rangatahi and their whānau

The WAVE team use these aims to guide practice in planning and implementation.

Project Partners

Partners in the WAVE project from 2006 include the local iwi through Te Rūnaka o Arowhenua, representatives from the education and health sectors, Sport Canterbury, and the Cancer Society. These representatives contribute to the WAVE working group and the WAVE steering group. Other partnerships have developed throughout the project. In 2009, the Timaru District Council piloted and has continued to fund an Active Transport health promoter role within the WAVE team. As new groups in the education sector have developed, WAVE has prioritised relationships with these, specifically the ECE leaders group and the Kāhui Ako across South Canterbury.

The WAVE Team

The WAVE team consists of WAVE facilitators, WAVE health issues promoters, a team leader, and the WAVE administrator.

WAVE facilitators have the primary relationship with the education setting. The WAVE facilitator's role is to build and maintain effective relationships with settings, and to support settings to lead their own health promotion strategies across the three spheres of Health Promoting Schools. This includes support to identify their priority health areas, develop a setting plan, and to access and link the settings to resources that will aid their health promotion and meet the goals identified in the plan.

The WAVE team also includes health promoters with experience and expertise in various health areas who provide facilitators with information, resources and advice, and assist with developing settings plans. The relationships with settings enable WAVE to link public health nursing and immunisation staff with education settings. WAVE health promoters work alongside health protection officers to support infection prevention planning particularly in early childhood education.

The WAVE administrator coordinates team administration, and manages term newsletters, online updates (Facebook and website) and WAVE resource bookings.

Targeting support to reduce inequity

Greater time and team resources are provided to education settings that have higher needs in their community. Education settings are allocated into 'focussed support' and 'general support' settings (Table 1), based on each setting's profile, including the Ministry of Education equity score (ECE) or decile rating for schools, transient population, rural isolation, and the proportion of Māori and Pacific students.

Table 1: WAVE Support for education settings

For all education settings in South Canterbury, WAVE support includes:	In addition, focussed support settings receive:
 The WAVE facilitator as the key point of contact 	 Specific settings plan support from WAVE facilitator
Provision of the WAVE newsletterEmail response to queries from setting	 Regular facilitator contact (visit and/or phone call)
 Up to date information for the setting e.g. email updates 	 Health and wellbeing toolkits with support to apply these
 Access to district-wide or cluster professional development 	 Support to include health and wellbeing areas into the curriculum, including access to the
 Invitation to participate in activities e.g. 5+A Day Challenge, awareness days/weeks Access to the WAVE Resource Centre 	 WAVE Resource Centre Support to engage with whānau in their community about relevant health and
 Information provided about health and wellbeing toolkits for setting to use 	 wellbeing areas Links to relevant community groups and organisations, and with relevant resources and
 Support for policy development, including water/milk only and healthy nutrition policies 	professional development.

Evaluation Methods

Robust evaluation has been a priority from the beginning of WAVE⁷. Evaluations have provided feedback to assess progress against the WAVE goals and to inform further development of WAVE. This section provides an overview of the methods of the evaluations between 2007-2018.

Stage 1 of the initial WAVE evaluations (2007-11) included both process and impact evaluation, investigating the programme implementation and the key changes in the education setting environment. Stage 2 evaluations (2012-present) have focussed on key objectives determined by the WAVE evaluation group. Further literature reviews have contributed to ongoing programme development.

Stage 1- Impact and Process evaluation of WAVE 2007-2011

Questionnaire development

The initial WAVE evaluation questionnaires for both process and impact evaluations were developed by the WAVE evaluation team at Community and Public Health⁷. Process evaluation investigates 'the extent to which the programme is being implemented as designed', whereas impact evaluation measures 'the degree to which the programme reaches its goal'⁷.

Impact evaluation

The baseline questionnaire focused on the key health issue areas of: physical activity, nutrition, Smokefree, alcohol and other drugs, sexual health, mental health and Sunsmart. Questions for each health issue were designed to capture changes in the Health Promoting Schools domains of 'Teaching and Learning', 'Partnerships and School Policies', and the 'Physical and Social Environment' of education settings⁸. General questions also investigated cultural inclusiveness and social and financial barriers that students experience.

⁷ Community and Public Health. (2011). WAVE - Final report of impact and process evaluations 2007-2011. Canterbury District Health Board https://wavesouthcanterbury.co.nz/media/1763/finalwave-evaluationreport110927.pdf

⁸ Calder,K, Begg A, et al. (2019). Education setting-based health promotion in New Zealand: evaluating the wellbeing and vitality in education (WAVE) programme. *Health Promotion International* 34(2) 236–247. https://doi.org/10.1093/heapro/dax076.

The WAVE facilitators delivered the questionnaire in a standardised interview with each education setting's key WAVE contact, at baseline (2007/8) and at 24 months into the WAVE project (2009/10)⁷.

Process evaluation

The process evaluation questionnaire explored the settings' experiences of WAVE engagement and communication, barriers to new initiatives, work with Māori students and their whānau, key WAVE initiatives, satisfaction with WAVE and suggestions for improvements to WAVE delivery.

WAVE facilitators conducted semi-structured interviews with the key WAVE contact which were guided by the facilitator-led questionnaire for each type of education setting (ECE, primary, secondary, tertiary). The interviews covered which health issues the settings had focussed on, and the level of activity and the involvement of key community partners (parents, school boards, wider whānau).

These interviewer-led questionnaires were collected at baseline 2008, at 12 months (2009) and at 24months into the WAVE project (2010)¹¹.

Stage 2 - Embedding and Improving, WAVE Evaluation 2012-18

The WAVE Evaluation 2007-2011 report recommended that future evaluations have one simple questionnaire with a small number of key quantitative and qualitative questions. Continuing the mixed method approach, the evaluation team simplified the information collection from 2012 to 2018 to include a set questionnaire for all WAVE settings, and semi-structured qualitative interviews with selected settings and/or stakeholders (including settings with high and low engagement with WAVE and across the range of education settings in age range, size, rurality). WAVE facilitators completed questionnaires with their WAVE setting contacts and the evaluator conducted all interviews via telephone⁹. Focus groups were added in 2014, beginning with feedback from the WAVE facilitators¹⁰. In 2016, the evaluator ran a focus group with a secondary school student WAVE team¹¹, and in 2018 the evaluator held a series of key stakeholder focus groups with representatives from the range of settings in South Canterbury¹². Evaluation reports are referred to by year of collection throughout remainder of this document.

The purpose of this stage of evaluation was to:

- assess progress across the three spheres of health promoting schools; 'the physical and social environment', 'curriculum, teaching and learning', and 'partnerships and services',
- assess engagement of WAVE with education settings,
- assess the impact of WAVE health promotion initiatives,
- assess strategies that lead to high level of involvement with WAVE (with a focus on low decile settings and those with higher proportions of Māori students),
- determine the level of support needed for settings to improve students' health related knowledge (2012-14)
- investigate how the process of WAVE's implementation was working,
- identify the critical success factors in WAVE

Analysis of the WAVE evaluation questionnaires and interviews/focus groups was conducted by a public health analyst, overseen by the WAVE evaluation group. The WAVE Evaluation group has consisted of the WAVE Leadership Team from Community and Public Health's Timaru Office, the Māori health promoter,

⁹ Community and Public Health. (2013). WAVE Evaluation 2012-13. Canterbury District Health Board.

¹⁰ Community and Public Health. (2015). Evaluation of the WAVE programme 2014. Canterbury District Health Board. https://wavesouthcanterbury.co.nz/media/1281/wave-evaluation-report.pdf

¹¹ Community and Public Health. (2017). Wellbeing and Vitality in Education: evaluation of the WAVE programme 2016. Canterbury District Health Board https://wavesouthcanterbury.co.nz/media/1861/wave2016evaluation170712.pdf

¹² Community and Public Health. (2019). Evaluation of the WAVE (Wellbeing and Vitality in Education) programme, 2018. Canterbury District Health Board https://wavesouthcanterbury.co.nz/media/4541/wave2018evalfinal190130.pdf

representatives with evaluation expertise from Community and Public Health's Information Team based in Christchurch, and an education sector representative.

Informed by evidence

Evidence reports from 2005 in WAVE's development were updated in 2013^{13} to inform evaluation. Additional reports on child and youth health indicators were commissioned in 2012^{14} and 2014^{15} , and a literature review exploring programmes for improving resilience and preventing suicide in education settings was prepared in 2013^{16} .

Timeline of WAVE evaluation

Evidence-based practice and ongoing evaluation have been two key principles of WAVE from its outset. Below is the timeline of WAVE implementation and evaluation

Table 2: Timeline of WAVE and evaluation measurements

2006	WAVE initiated (May 2006)
2007	WAVE launch June 2007
2008	Baseline survey (process & impact evaluation)
2009	Follow up 1 (process eval) 12 month
2010	Follow up 2 (process eval & impact 24 month)
2011	5-year evaluation report

2012	Second stage evaluation, questionnaire & focus group + case study	
2014	Repeat questionnaire & focus group + case studies	
2016	Questionnaire & focus group + case studies focus on 4 areas	
2018	Streamlined questionnaire & focus group + case studies	

Evaluation results

This section provides key results of the WAVE evaluations undertaken from 2008-2018, presented according to the success factors identified in the evaluations.

These success factors were determined from responses to the questions "what has worked well with WAVE?" and "what have been the success factors over the previous 12 months?" across the whole period of 2008-2018. Figure 4 shows the common themes which have been weighted according to the frequency

¹³ Community and Public Health. (2013). Child and Youth Health Promotion: Update of the evidence since 2006. Canterbury District Health Board

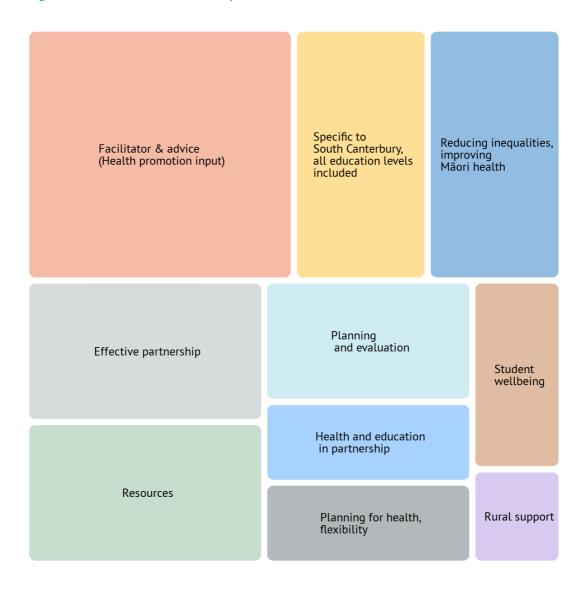
¹⁴ Community and Public Health. (2013). South Canterbury Child and Youth Health and Wellbeing Indicators. Canterbury District Health Board

¹⁵ Community and Public Health. (2015). South Canterbury Child and Youth Health and Wellbeing Indicators. Canterbury District Health Board

¹⁶ Community and Public Health. (2013). School-based programmes to prevent suicide and build resilience among students A literature review and national stocktake. Canterbury District Health Board

they appeared in evaluation reports. The most common success factors that featured were: 'health promotion input from the WAVE facilitator', followed in equal frequency by: 'WAVE being specific to South Canterbury', 'effective partnerships', 'WAVE's focus on Māori health and reducing inequity', and 'WAVE being a credible source of health resources'. Other aspects were regularly noted such as 'supporting student wellbeing', 'support for health planning' and 'having evaluation built into the WAVE programme'. Quotes are provided within each section to further illustrate the most commonly mentioned success factors. Further detail of these evaluations is available in the published reports.

Figure 4: Success factors identified by interviewees in WAVE evaluations from 2008 to 2018



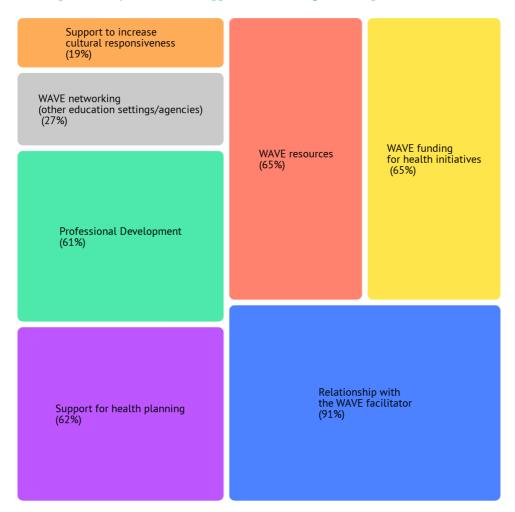
WAVE health promotion input and advice

The WAVE facilitator and the support they provided were consistently identified as a success factor. This section describes what settings saw as important about WAVE's support, and the changes within settings that flowed from it.

WAVE facilitator and support

In the 2018 survey, settings were asked to select the most important ways WAVE has supported them over the past 12 months, choosing four options from a range of responses (Figure 5). Settings identified 'the relationship with their WAVE facilitator' most often (91%, n=70), followed by 'WAVE resources' and 'WAVE funding for health initiatives' (65%, n=50), and 'support for planning around health in their education setting' (62%, n=48). Figure 5 shows the full range of responses in relative proportion of the responses received.

Figure 5: The most important ways WAVE has supported our setting over the past 12 months (2018):



The following quotes further describe the value settings place on the regular, proactive contact from WAVE, and the consistent, reliable advice provided. They also show a growing understanding of WAVE's holistic approach to health promotion which takes account of the whole setting:

"The number one value of WAVE for us and our setting here is that they are proactive. So, with a good [WAVE facilitator] who knows your setting, this is their job, this is what they do and so they're thinking about it... health is not always my top priority... it does keep focus on wellbeing and health that I guarantee we wouldn't have without WAVE." (2018)

"I was talking to someone...that's not from this region, [about WAVE supporting] Smokefree, your healthy eating, your physical activity, promoting the gardening and your healthy living. As an early childhood teacher, I don't know who else would provide that information for you. And WAVE bring things up that you probably wouldn't have thought of." (2016)

A further summary of the evaluation findings on the theme of WAVE's relationships is tabled in Appendix i.

Changes in practice and environment within the education settings

Evaluations measured changes to practice and the education settings' environment with questions about initiatives that had supported healthy choices in the previous 12 months (2007-2014), questions on specific health topic initiatives (2012-2016), and through feedback from focus groups and interviews (2012-2018). A summary of these changes is included in Appendix iii describing changes within selected topics, with a table of reported 'initiatives over the past 12 months' collated by the three spheres of Health Promoting Schools.

- By 2016, almost all ECE and primary schools had nutrition-related initiatives, such as edible gardens, breakfast clubs and healthy options in canteens.
- Toothbrushing programmes developed in ECE and primary schools as oral health was identified as a health need.
- Active travel initiatives such as walking school buses increased between 2012-16.
- Evaluations noted the majority of ECE and primary settings had Sunsmart initiatives (adequate shade, sunhats and sunscreen), and secondary schools increased promotion of sunhats between 2012-16
- From 2012-16 settings broadened the scope of their smokefree policies to include smokefree environments outside the ECE or school boundary, and for offsite events.
- Settings at all levels of education promoted mental wellbeing in 2016 (30% of ECE, 71% of primary and 67% of secondary settings).

In addition to within setting initiatives, a number of community-wide initiatives have developed. Figure 6 illustrates some of these health initiatives and community-wide partnerships.

WAVE is specific to South Canterbury

Being **locally relevant and responsive** to local needs was highlighted across the evaluations and particularly in 2018 by focus group participants:

'What makes WAVE quite important here is that it is locally based. And a lot of our services and support services come from outside the district... And so, WAVE is based here, it's part of us, it's part of our community. WAVE understands us and our community...' (2018)

'WAVE has become very much a part of South Canterbury and the envy of many because there are some serious gaps in the disengagement between education and health in other parts of the country, and this has really been a catalyst for people working together and you don't see anywhere else.' (2018)

The inclusion of all levels of education, from early childhood education to tertiary providers, was remarked upon in 2011 as a unique aspect of WAVE that provides consistency in health promotion between sectors of the education system.

Figure 6: Examples of WAVE health and wellbeing initiatives and work with settings.



Effective partnerships

Evaluations garnered feedback on a range of partnerships. This included the partnership that WAVE, as part of the health sector, developed with education, and the education settings' own partnerships with boards of trustees, staff, students, community groups or organisations. Engagement with WAVE grew over time, both in terms of participation (having a signed Memorandum of Agreement) and the degree of interaction that participating settings reported.

In the first 5 years of WAVE to 2011, most education settings in South Canterbury engaged with WAVE (94%), and by 2016 all education settings, from Early Childhood Education to Tertiary education, in the South Canterbury region had Memoranda of Agreement with WAVE (Figure 7). The WAVE team has been credited with enabling partnerships not only between health and education, but also with support organisations, as well as encouraging relationships among education settings in the region.

"The wider community is involved in WAVE, including parent committees, Boards of Trustees, teaching and nonteaching staff, parents, local iwi, contractors and service organisations such as Rotary." (2011)

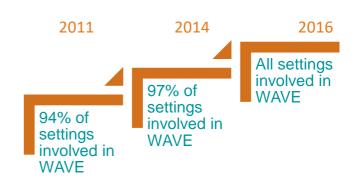


Figure 7: Proportion of Education Settings with a Memorandum of Agreement (MoA) with WAVE

In the 2012 evaluation, support from Boards of Trustees, parents, community, staff, as well as student engagement were noted as success factors for improving students' health and wellbeing. This feedback is illustrated in the following responses from settings:

"[For] many of our rural school the connections with growing gardens and cooking is so much part of the community, the focus [on food] and what our parents want for our children and their families, it's an absolutely perfect match." (2016, brackets added)

"The outcome is that students are starting to listen and understand about those health issues. The students have got increased health literacy" (2018)

Hauora Māori and reducing health inequities

Raising the profile of hauora Māori (Māori health) and supporting Māori cultural responsiveness, is a core part of health promotion in New Zealand. After 2010, a deeper understanding of the inequities in health and education developed among education staff. As a result, the WAVE team experienced a large increase in requests for support to promote Māori culture and wellbeing, and to help settings understand how to support Māori students and whānau proactively.

Improving Māori Health

Three additional Māori health questions were included in the process evaluation in 2008. These questions asked:

- how effective settings thought their work with WAVE had been in addressing the health and wellbeing of Māori students,
- to what extent settings had involved or consulted with whānau and the wider Māori community as part of their work with WAVE, and
- whether work with WAVE included any specific strategies to engage Māori students.

Interim analysis of these questions (2009) showed that some settings maintained a focus on 'treating all students the same', and that further input was needed to broaden teachers' and education leaders' understanding of the importance of supporting Māori students and whānau.

The WAVE leadership organised a two-day professional development workshop in April 2010 with Dr Angus Macfarlane and Sonja Macfarlane from the University of Canterbury, titled "Raising Māori Potential". The first day engaged education settings, supporting them to understand what reducing inequity for Māori means and how WAVE can support them. The second day was for the WAVE staff, exploring how to enhance work with settings to raise Māori potential. A primary school youth forum, Kia Matauraka Hauora,

followed in May 2010 on the topic of health promotion through a cultural context. Students, teachers and parents networked and learnt new skills to share back at their own schools.

This workshop and its follow-up actions and conversations are mentioned repeatedly in subsequent WAVE evaluations, illustrated by the following quote from 2016:

"I think WAVE are much clearer in targeting what the key work is... Māori health is one example. They've worked with one of our kindergartens to start up a plan. That involved the community. They provide very good professional development, so they've brought in key researchers from Canterbury University... so providing information, professional support and development and resources, and being available. The area that has the biggest impact on me has been the area of Māori health"

Table 3 gives a summary of the interview and focus group feedback over time.

Table 3: Evaluation responses regarding WAVE support for hauora Māori

2011	Settings expressed an increased confidence to support the health and wellbeing of Māori students. The proportion of ECE and Primary Schools addressing cultural inclusiveness increased from 2008 to 2011.
2012	Interviewees noted that the professional development from Canterbury University led to practical ways to engage with Māori whānau at school, increasing the ability of settings to engage with whānau Māori.
2014	The WAVE facilitators' focus group in 2014 noted 'support for Māori Health' as a success factor for the previous two years. As a result, facilitators had seen a large increase in requests for support for Maori health/cultural development. Facilitators were able to encourage settings to go beyond the support that WAVE could provide, towards proactive action for Māori cultural development. Settings gave examples of WAVE input such as support for the local Matariki celebrations (funding, planning support, attending and promoting) which enabled them to promote Māori health and culture.
2016	Several respondents noted WAVE's aim to reduce inequities in health with a focus on improving Māori health. The ways that WAVE worked to reduce inequalities included: providing appropriate professional development to staff; providing advice and resources; developing professional networks; and targeting resources.
2018	WAVE's focus on improving Māori health and education outcomes was apparent to stakeholders in focus group feedback. WAVE's support for cultural responsiveness was discussed as one of the success factors for WAVE, and participants noted how the support has been continuous over long periods to build understanding and action over time.

Questionnaires between 2012-2016 collected information on the proportion of settings that had initiatives supporting cultural health in the previous 12 months. The proportion of settings that had kapa haka and Matariki celebrations increased between 2012 and 2016. Matariki celebrations became more common with 95% of ECE, 84% of primary schools and 56% of secondary schools holding these in 2016, Kapa haka groups in ECE grew from 25% of settings to 34% of settings having a group in 2016, and 89% of secondary schools had a kapa haka groups in 2016, up from 75% in 2012. Figure 8 shows the variety of initiatives across ECE, primary and secondary settings in 2016.

Percentage of settings with cultural initiatives Kapa Haka Matariki celebrations Multiple signs in Te Reo Activities that recognise and celebrate other cultures Other 10 20 30 40 50 60 70 80 90 100 ■ECE (n=44) ■ Primary school (n=38) ■ Secondary school (n=9)

Figure 8: Cultural health initiatives in settings in the last 12 months, by setting type, 2016

Reducing health inequities

To reduce health inequities, WAVE proactively supports priority settings: those with socio-economic challenges rural and transient working populations, Māori and Pasifika whānau, ethnic diversity (English as a second language), and other social needs.

The initial impact evaluation included analysis on how well settings were able to address financial and social barriers to health and wellbeing over the initial 2 years of WAVE. The settings' self-ratings in the questions of 'how well the setting works with families to ensure children have breakfast and lunch', and in 'how well the setting avoids activities which would exclude some children for financial reasons' increased with over 45% rating these as "very well" by 2010. Following the impact evaluation of 2008-2010, WAVE evaluations did not ask specifically about financial and social barriers to health and wellbeing.

Settings commented that WAVE's knowledge of and commitment to priority populations was a success factor (2018):

'Those priority needs in the community as well, they're always evolving. So, WAVE has a good knowledge of that... A lot of our parents, there's high amounts of poverty and WAVE knows that and supported us... Our families really respect them and will reach out to them as well...'

In addition, settings acknowledged the value of WAVE's resource centre in making resource available to reduce inequity:

"...hand on heart WAVE are such an asset for us 'cos we're not well funded and we wouldn't have access to half of this stuff so... I'd be hard pushed to think of anything [WAVE could do better]." (2018)

WAVE is a credible source of health resources

WAVE provides the health resources and links for settings to access further health and wellbeing information, and the support to plan putting resources into action.

Settings value access to physical resources that enable health promotion, and which may only be required for short time periods.

'...if you talked to the head teachers and the teachers in schools... they see some direct and immediate benefits for children... I have a good example of that from today, there's a kindergarten I was at that have now got two-thirds boys and they're really looking to have to develop their physical activities

programme. And immediately we said, let's go and see what resources we can access from WAVE... so it would be the sort of things that are reasonably high-cost items, that are difficult to store but will meet the needs that are going to be there, perhaps only for 6-12 weeks. And so, if every two weeks the kindergarten brings in another physical resources to extend them physically, that's where that will really support that programme.' (2018)

Settings commented on the value of WAVE's resource centre, which provides access to a wide variety of resources in conjunction with WAVE's health promoter resource.

'... it's the communal resources, every single school... we couldn't afford to buy the stuff that's in the WAVE resource shed. The ones that you use once a year... so it's having those resources and the ideas, and the people contacts in a central location... so we don't have to have all that in our separate schools.' (2018)

As part of the targeted approach to reducing inequities in health and education WAVE offered funding for health initiatives. Settings were able to apply to the funding round once a year, and the highest priority applications were reviewed by the WAVE team. When resources were noted as a success factor in the evaluations, settings also acknowledged the value of WAVE's funding for health initiatives.

Planning and Evaluation

The quality and ongoing nature of WAVE evaluation was noted and valued by the community. For example, one interviewee stated:

".. I was quite impressed how rigorous the delivery and the set-up and the processes were. I thought the evaluation they did was fantastic, because it wasn't a matter of just keeping on doing what you're doing 'cos it looks good and everyone's happy, it was a matter of evaluating it to make decisions about how it was going and what areas of the community needed further strengthening to meet the goals." (2016)

A sense that regular evaluation leads to constant improvement of the way that WAVE works with settings was mentioned:

"And WAVE continually evaluate and refine what they're doing to strengthen their practice. It's not like they're doing the same thing that they did ten years ago." (2018)

Discussion

Reflecting on the success factors and strengths of WAVE provides an opportunity to review what has been learnt from this programme and how this can help inform and strengthen health promotion in the new National Public Health Service.

The WAVE evaluations consistently highlighted success factors which align closely with the goals of WAVE:

- WAVE's relationship with education settings is proactive, consistent, and keeps health and wellbeing part of regular conversation;
- WAVE focuses on Māori health and reducing inequity in health and education;
- WAVE is specific to South Canterbury, has local knowledge of the area and people, and is able to tailor health promotion to local needs;
- WAVE is a credible source of health resources and links.

The themes that settings identified as success factors in WAVE show education settings' awareness of, and the value that they have placed on the community health promotion provided by WAVE. WAVE evaluation participants have commented that "WAVE is a catalyst for health and education working together".

Focus on Māori health and equity

Raising the profile and support for Māori cultural wellbeing has been an important strength of WAVE. Providing opportunities to participate in and showcase Toi Māori (Māori arts) helps to raise the mana of tikanga Māori (culture) and therefore the mana of tamariki and akonga Māori (Māori students), while increasing the cultural knowledge of the whole setting community. WAVE's investment to support education staff in understanding the importance of hauora Māori has contributed to an increase in the number of settings with organised cultural groups (Kapa haka groups). Community celebrations of te ao Māori, including Matariki celebrations, Ki o rahi tournaments, Kapa haka and waiata festivals, have grown in number and in community engagement with WAVE's long-standing support.

Consistent health and wellbeing promotion

South Canterbury's WAVE programme has had a unique opportunity to continue consistent health promotion within the education community. The core partnership of Community and Public Health with the local South Canterbury DHB has supported WAVE locally to bridge any short-term transitions in national priorities and to remain agile, adapting quickly to new initiatives.

All licensed education settings across the South Canterbury region are engaged in WAVE, including early childhood, primary and secondary schools, and tertiary education. This enables consistent health messages to be shared across all education settings in the region. In the traditional Health Promoting Schools framework, support is limited to primary and secondary schools. In many regions, health promoters work with selected schools only, targeted to reduce inequities. WAVE has adapted its targeted support, providing 'general support' to all settings and 'focussed support' to targeted settings, meaning that WAVE is inclusive of all children and young people engaged in education.

Having long-term continuity and the consistent relationship with education settings has allowed WAVE to operate with flexibility. Asking education settings for their feedback regarding their own priorities for health and wellbeing led to greater engagement with WAVE and health initiatives. Settings have been able to build on health issues as they are ready, and health promoters are able to tailor support to settings' needs. WAVE's relationships across a range of settings has resulted in sharing ideas between settings and has encouraged settings to work together and learn from one another.

Evidence based planning and evaluation

Regular evaluation has provided education settings the opportunity to reflect on their own work in health and wellbeing, draw attention to aspects of WAVE to highlight or to strengthen, and raises awareness of the health promotion process.

Based on sound health promotion planning through the Health Promoting Schools framework, grounded in Te Pae Māhutonga and the Ottawa Charter, and with regular evaluation, WAVE's health promotion enables education settings to lead and implement health promotion in their own environments. WAVE reflects the five aspects of the Ottawa Charter. Healthy policies, supportive environments and developing personal skills for staff, students and whānau, are seen in settings' activities and evaluation feedback (Appendix and Figure 6); reorienting health services has involved linking immunisation staff with education settings and supporting infection prevention planning; while annual festivals and events have strengthened community action, particularly in the area of Māori cultural wellbeing.

Conclusion

What began as a new approach funded by the health sector to support population health and wellbeing through whānau via education settings has now become part of the South Canterbury education landscape and a normal part of everyday practice for preschools, kindergartens, playcentres, schools, and training providers. With support continuing over 16 years to date the South Canterbury community is proud of WAVE and sees it as something that is trusted and is here to stay. As one focus group participant (2018) said:

'There's many groups who are wanting to help in schools... but somehow just the sheer structure of WAVE and the relationships they've built up with all ECE and schools have allowed that to happen, whereas other more isolated groups who are well intentioned never really get off the ground and make any effective change.'

Participants in WAVE evaluations have commented that 'WAVE is a catalyst for health and education working together', a phrase that summarises the goal, story and value of the WAVE project in South Canterbury.

Appendix i - THE WAVE logic framework

LONG-TERM OUTCOMES

Children and young people learn well and are well.
Children and young people flourish

MEDIUM-TERM OUTCOMES

Healthy nutrition

Good oral health

Life-skills

Physically active

Healthy relationships

Smokefree

Autonomous

Resilient

No alcohol harm

Skilled learner

Meaning and purpose

Safe

Good educational outcomes

Connected and participating

SHORT-TERM OUTCOMES

Links and partnerships

- Whānau engagement with education settings
- Connectedness between education setting and community
- Good communications

Ethos and environment

- Safe environments
- Nurturing environments
- Staff flourishing
- Access to and celebration of Te Ao Māori

Learning and curriculum

- Health and wellbeing embedded in the curriculum
- Holistic

Support policy development

Resources to support health

Linkages and information

WHAT WAVE OFFERS

Professional development

Event support

Collaboration with other agencies

FOUNDATIONS

Te Tiriti o Waitangi Equity of outcomes

Appendix ii – WAVE's longstanding relationships

Evaluations have indicated that the WAVE's relationship with a setting has been key to the health and education partnership. WAVE facilitators have been the settings' point of contact for health and wellbeing questions and resources. Over time, comments from interviewees have placed an increasingly strong emphasis on the importance of WAVE facilitators and the WAVE team, in building partnerships between health and education, between education and support organisations, and strengthening relationships between education settings across the region.

Table 4: Summary of evaluation feedback on WAVE relationships as a success factor

2011	The process evaluation of the first five years showed that the facilitators were considered WAVE's most essential element. Settings noted the facilitators' work alongside settings, consulting on their priorities for health, and providing relevant resources and information. Settings valued having access to people with expert or specialist health knowledge.
	A wide range of people were involved with WAVE in settings—students, staff, Board of Trustees, parents, (whole school community) as well as external advisors.
	Rural settings observed that WAVE's holistic approach works well for them, being similar to the culture of rural communities.
2012	In the 2012 feedback, all interviewees discussed the crucial role of personnel to the success of WAVE: A good relationship between the setting and the WAVE facilitator means the WAVE and health initiatives work well. The WAVE facilitator is proactive and supports the WAVE student health team, whereas frequent changes to the WAVE personnel can disrupt the process.
2014	WAVE facilitators themselves were part of the feedback in the 2014 evaluation. Facilitators noted:
	 That strong relationships were the most important success factor for WAVE, and strong relationships with settings take time.
	 That seven years of consistency in offering the WAVE programme in South Canterbury has meant that settings know WAVE's role in the region.
	 A shift in WAVE's approach to ask settings how they prefer to work enabled two-way health promotion conversations, and greater trust.
	 A general increase in requests for WAVE support, and a large increase in requests for support for Māori health and/or cultural development (discussed further in the next section).
	From the settings' point of view an effective partnership between the WAVE facilitator and the setting was a key theme. Key attributes of a successful WAVE facilitator were identified as:
	 comprehensive understanding of the setting type they are working with balance between being in regular contact and understanding the busy nature of
	schools
	 working alongside schools, and providing ideas, guidance, advice and support for settings, including regular contact.
2016	Stakeholders interviewed in 2016 (n=12) said that WAVE has become the "trusted voice of all things health". They commented on the high level of understanding that WAVE has of education environments and the ability of WAVE facilitators to work collaboratively with education. This enables teachers to focus on health, and to support children and families in

their health. Community organisations also mentioned ways they work in partnership with WAVE.

"Sometimes, in schools we are full on... If it's too hard I just can't do it. I haven't got the hours in the day. [WAVE facilitator] just comes in here, knows what you need, has a quick conversation and next thing we're onto it. And I really appreciate that in her." 2016 interview

A theme also appeared relating to the partnership between WAVE and school students. Student WAVE teams were leading initiatives to create environmental change in schools (water/milk only) and liaised with WAVE facilitators. Feedback from a high school WAVE team indicated that they were motivated to be a part of the team as it enabled them to have a positive effect on the students at their school.

2018

Key stakeholders gave feedback on WAVE via five focus groups and three interviews (total n=28). Critical success factors for WAVE were identified in the focus groups as: the collaborative partnerships between WAVE and settings; that WAVE is a catalyst for health and education working together; and that WAVE provides support to settings for planning around health. The development of these strong, trusted relationships with WAVE over time was noted as contributing to its success. Rapport between WAVE facilitators and students had also developed as a success factor. Participants noted that there is often disengagement between health and education in other parts of the country and WAVE has been a catalyst for people working together in South Canterbury.

Facilitators and WAVE were also seen to have a wider connecting role, with the facilitator being a 'go-to' person to link the appropriate people or organisations that can support an education setting in an area of health expertise. WAVE also enables settings to work with one another on health and wellbeing initiatives.

"...it's that go-to intermediary person who, like [our WAVE facilitator], who you go to and you say, this is what we're thinking, and he knows how to help the school get that support... there's so many things that happen in a school, whether it's working with [Ministry for Children, Oranga Tamariki], a whole lot of different organisations like that, it's also fragmented, and when you actually need someone you don't really know who to ring or who to organise..." (Individual interview, 2018)

Appendix iii – Examples of WAVE initiatives

Early Childhood, Primary, Secondary and Tertiary settings provide healthy environments

The 'whole setting approach' refers to health promotion being a part of the three spheres of Health Promoting Schools: the physical and social environment; curriculum, teaching and learning; and partnerships and services. In this approach health promotion is embedded into all areas of the educational organisation.

Specific initiatives were asked about in the 2012-2016 questionnaires for Nutrition, Physical Activity, SunSmart, and the percentages who held initiatives for Mental Wellbeing and Smokefree.

Nutrition

By 2016, almost all ECE and primary schools had **nutrition-related** initiatives (98% of ECE, 97% of primary schools), and 79% of high schools had nutrition-related initiatives. The evaluation report noted several increases in nutrition-related initiatives supporting healthy choices between 2012 and 2016:

- 26% of primary schools had breakfast clubs in 2016, compared to 19% in 2012.
- 67% of secondary schools had a canteen that supports healthy choices in 2016, compared to 50% in 2012.
- Across all setting types, the proportion of settings that have a fruit and vegetable supply initiative
 has increased between 2012 and 2016.
- Over four fifths of ECEs and primary schools had edible gardens in 2016 (91% of ECEs, 82% of primary schools).

Oral health

Oral health developed over time as a health issue addressed in settings. Toothbrushing programmes were in place in 36% of ECE and 16% of primary settings in 2012, and by 2016 55% of both ECE and primary settings had oral health initiatives in the past 12 months.

Physical activity

There was an increase between 2012 and 2016 in the proportion of settings with physical activity initiatives: over one third (34%) of ECEs had a walking bus in 2016, compared to 11% in 2012, and almost half (44%) of secondary schools had Jump Jam in 2016, compared to 13% in 2012.

SunSmart

In 2016, over two thirds of settings were providing adequate shade (82% ECE, 95% primary, 67% secondary), all settings promoting wearing sunscreen (100% ECE and primary, 78% secondary) and almost all ECE and primary settings promoting wearing sunhats (98% of ECE, 100% of Primary). There was also an increase in secondary schools promoting wearing sunhats from 13% in 2012 to 56% in 2016.

Smokefree

Policies broadened over the period of 2012-16 to include smokefree environments outside the ECE or school boundary, and for offsite events.

- Almost three quarters of ECEs (73%) had a Smokefree policy for outside ECE boundaries in 2016 (50% in 2012).
- Almost four fifths of primary schools (79%) had a Smokefree policy for outside school boundaries in 2016 (55% in 2012).
- Over four fifths of secondary schools (89%) had a Smokefree policy for outside school boundaries in 2016 (71% in 2012).
- Almost half of ECEs (45%) had a Smokefree policy for off-site events in 2016 (21% in 2012).

• Over three quarters of secondary schools (89%) had a Smokefree policy for off-site events in 2016 (71% in 2012).

Mental Wellbeing

• Mental wellbeing was promoted in 30% of ECE, 71% of primary and 67% of secondary settings in 2016.

A whole school approach to health promotion

Interviews and focus groups collected information that showed the value of the holistic, whole school approach to health promotion. Responses reflected how accessing health knowledge, links, resources and the assistance of WAVE has enhanced health at the education settings, saving time and reducing barriers for education settings in providing healthy environments and health-related education.

"...one thing that's on my radar is about Smokefree, and I think that's probably had quite an impact on me and the teachers here... it's made us think about things a bit deeper. And at the centre we do have teachers that are smokers and so it has been quite real for us... WAVE give us information that we can put out to parents as well. I think if you can get buy-in from the teachers, then they are there as the agents to share that information... WAVE gives us ideas of how you can support people and just make Smokefree the norm." (2016)

"I think the whole thing I was very clear on was [that WAVE was] supporting community organisations and that included schools to provide better outcomes for children in all the areas of health - physical, mental, emotional... and I hadn't come across a group like this before." (2016)

Initiatives over the past 12 months (2007-11, 2012-18)

Each questionnaire throughout the evaluations asked for examples of initiatives that settings have undertaken in the past 12 months. These have been grouped according to the three spheres of the Health Promoting Schools model. Table 5 shows examples of activities in the 2008-11 impact evaluation as detailed from the survey questions.

Table 5: Health Promotion initiatives over the past 12 months, as reported by settings 2008-11

	Physical & social environment	Curriculum, teaching and learning	Partnerships and services
Nutrition			
	Developing food and nutrition policies/guidelines Establishing breakfast and lunch clubs Implementing changes to canteen lunch options Developing edible gardens	Developing a healthy food recipe book Cooking and baking healthy items Removal of sweets as classroom rewards	Parents/students surveys on lunch options Student health teams led projects to present to staff, Board of Trustees and community members Holding a nutrition hui Staff professional development Involving a nutritionist in health promotion
Physical Activity			
	Whole settings consultations with students, teachers, committees, Board of Trustees. Playground redevelopments Accessing WAVE funding for equipment Walking school bus, footpath frenzy Wheels day Active lunchtimes	Physical Activity within class programmes	Involvement in partner programmes - Run Jump Throw, jump jam, Jump rope for Heart, Active Transport, Sport clusters Supporting volunteer coaches and drivers for sport
Sunsmart			
	Compulsory sunhats for Term 1 & 4 Development, monitoring and communication of sunsmart policies Accessing and installing shade and identifying areas for action Sunscreen available for students and staff Sunsmart theme days.	Sunsmart units in curriculum- based teaching Students developing sunsmart pamphlet for community	Sunsmart workshops for staff Liaising with the Cancer Society advisor Sunsmart accreditation Using/loaning portable shade gazebos for school events
Mental health			
	Minding minds programme for teachers Restorative justice practices Establishing new school values in consultation with students	Peer mediation training Options for active student leadership	Developing relationships; parent meetings All about me course - personal safety programme for ECE WAVE Youth Forum

Engaging with Māori students to get their voice Kapa haka Developing achievement plans based on Kaupapa Māori principles Use of Te Reo, teaching te reo Use of Waiata Working with local iwi
Encouraging whānau
participation
Participation in FLAVA festival
and cultural festivals
Access Māori providers for advice
and support

Appendix iv – Evaluation of Tertiary settings' experience

Tertiary settings in South Canterbury include YMCA South and Mid Canterbury, Aoraki Alternative Education, Trade and Commerce, Aoraki Polytechnic which includes Aoraki Rural Training Centre and Timaru Fishing School. With the different educational and structural environments of tertiary settings, the 2006-11 evaluation findings recommended a separate questionnaire be developed for tertiary setting.

A tertiary specific report in 2014 showed mental wellbeing professional development was frequently provided¹⁷. Networking was a strong theme that tertiary settings valued, including WAVE's coordination of the tertiary sector network. Settings referred to the WAVE facilitator as the 'link' across the tertiary sector. All settings reported that they valued the role that WAVE has across the tertiary sector including informing settings of any relevant professional development or activities that are going on. All the settings interviewed reported that WAVE provided useful support around suicide prevention, including provision of research on youth suicide, linking tertiary setting with QPR training (training in suicide prevention), as well as facilitating mindfulness training.

The most important ways that WAVE had supported tertiary settings in the previous 12 months included: networking, resource and funding provision, professional development and health initiatives.

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¹⁷ Community and Public Health, 2014. Evaluation of the WAVE project in Tertiary Education Settings in South Canterbury. https://wavesouthcanterbury.co.nz/media/1762/wavetertiaryreview140711.pdf













