



**MARLBOROUGH
DISTRICT COUNCIL**

Marlborough Kids' Edible Garden Programme Evaluation

for

Marlborough District Council

Record No. 13120767

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Executive Summary

This report is part of the Marlborough District Councils initiative to review how the Kids Edible Garden (KEG) programme has taught students to re-use organic waste, grow organic edible gardens and to eat the produce they make. In the early stages of the programme the primary focus was to educate children to grow, harvest vegetables and enjoy eating them. It was recognised that there was an opportunity to link the programme to the Curriculum and deliver the key competencies to enable children to develop life long skills.

The journey began in 2005 as a trial in five Marlborough schools in a collaborative partnership between Marlborough District Council (MDC) and Nelson Marlborough District Health Board (NMDHB). Over the past 8 years the programme has grown significantly both in terms of the programme but also relationships and communication. Today there are 20 schools which represents over 60% of schools in the Marlborough region, all with raised gardens, a curriculum based programme, professional development for teachers and a funded facilitator to support learning in the garden.

Funding was received from NMDHB during 2008 to 2012 to pilot the next stages of the KEGs and respond to the feedback and suggestions being provided from schools. This allowed greater opportunities to work collectively with other organizations including the Marlborough Community Gardens, The Marlborough Farmers Market and the local organic grower's network.

To complete the cycle of composting, growing, harvesting and eating, a cooking component was introduced. Schools were supplied with a "Kitchen in a box" and by working with the Marlborough Farmers Market and their mobile kitchen unit, facilitators attended workshops on using fresh seasonal produce from their school garden and learnt to cook simple recipes that could be shared with the students in schools.

Many of the initial gardens have been extended in size and 15 schools received further funding to put in an Open Orchard. Marlborough District Council provides support for the schools by providing them with a comprehensive kit, facilitation of the programme so it can deliver a curriculum based programme in schools and a coordinator to oversee and support the entire programme.

The evaluation indicates the initial aims of the Kids Edible Garden have been met. The programme is seen by schools to be an interactive way to educate children to reuse organic waste, grow organic edible gardens, eat the produce grown and cook easy recipes using seasonal produce. The gardens are used as a tool to help teach students lifelong skills that can be linked with the curriculum and deliver key competencies. There was a high level of awareness of the programme, an understanding of its purpose and some sustained behaviour change. The main concern that many of the schools had was the need to maintain funding and support for facilitation, as this is paramount to keep the programme alive within schools.

Background

A Christchurch Trust in 1995 created the Kids' Edible Garden programme. The Kids' Edible Gardens Trust developed "A Growing Teachers" manual and a programme to support this, mostly funded through grants and some sponsorship.

Marlborough District Council was given permission to use the guide and adapt the programme to work in the Marlborough region.

The Marlborough Programme

The Kids' Edible Gardens programme aims to teach students to re-use organic waste, grow organic edible gardens and eat the produce they make.

Since 2007 the programme has been supported by the Nelson-Marlborough District Health Board Public Health Service and Nutrition and Physical Activity programme to enable healthy eating and opportunities to work in an integrated way with this education programme. The Marlborough District Council programme is supported by a garden facilitator, contracted or working in the school, paid by the Council to the school involved. Council also provides ongoing training for facilitators and teacher professional development. New teaching resources have been developed to help integrate the garden programme with the classroom programme.

Consultation included:

	Principals	Lead Teacher	Facilitator	Parents/ Caregivers	Students
Total number of participants involved with interviews	6 (individual interviews)	5 (individual interviews)	5 (individual interviews)	23 (parent/caregiver individual and group interviews)	70 (student participants in group interviews)

A range of schools were chosen to take part in this evaluation to capture school size, demographics and decile.

The recently released National New Zealand Survey¹ of Children and Young People's Physical Activity and Dietary Behaviours found that 92.8% of children and young people involved with growing vegetables at home or at school were more likely to eat vegetables. This finding adds weight to the approach of encouraging children and young people to become involved in growing, preparing and cooking foods.

This is an overview report that presents a summary of findings across the 8 years that KEGs has been running in Marlborough.

Delivery of the Evaluation

Purpose of project

1. To determine the success of the KEGs programme in schools.
2. To determine the success of the KEGs programme in the curriculum.
3. To determine the success of the KEGs programme in school communities.

Method

The research consisted of face to face interviews with principals, teachers, facilitators, parents/caregivers and students in at least five different size schools in both rural and urban areas who are actively using the Kids Edible Garden programme. Nineteen parents/caregivers were interviewed face to face with four preferring to be interviewed over the phone. The aim of these interviews was to determine the value that is placed on the programme, the outcomes it has achieved, the success of the programme both in the school and in the wider community.

Lead teachers, facilitators and principals were contacted individually to arrange suitable meeting times, while the lead teachers and facilitator's arranged groups of children to be involved in a focus group meeting.

Capturing parents and caregivers proved difficult so advertisements were placed through the newsletters at all KEGs schools and a Koha of \$20 Bengi Co vouchers was provided to each parent/caregiver who

¹ A National survey of Children and Young People's Physical Activity and Dietary Behaviours in New Zealand: 2009/09 Key Findings, June 2010, The University of Auckland and Synovate, pg 47

gave up their time to be interviewed. A combination of selective processes were used; those shoulder-tapped by the school, snowballing techniques; key people recruiting friends or family who met the criteria for the sample and self-selection; advertisement in school newsletters were used to achieve the required sample numbers.

Background information on the KEG's programme in Marlborough was researched and reviewed to identify common factors for success, along with discussions with the programme manager, KEG's Coordinator and Public Health Promoter to gain relevant information on the programme.

Formatted questions used within interviews

Teachers/Principals/facilitators

1. What part of the curriculum does the Kids' Edible Garden fit into in your school?
2. Do you use the KEG programme to deliver any of the key competencies?
 - Thinking.
 - Using language, symbols and texts.
 - Managing self.
 - Relating to others.
 - Participating and contributing.
3. Do you use the KEG programme to integrate in health education?
4. Is the KEG programme in your schools strategic plan?
5. What changes would you like to see made to the programme to suit your school needs?
6. Has KEGs assisted with links between other schools? If yes, prompt responses to.
 - a) Relationships formed.
 - b) Sharing of resources.
 - c) Sharing of knowledge.
7. Has KEGs assisted with links between the wider community?
 - a) Those whom do not have children attending the school (neighbours).
 - b) Businesses and agencies (Salvation Army, Mitre 10 etc).
 - c) Other community programmes (community gardens, mentoring programmes etc).
8. Are there any agencies you feel need to be involved with KEGs to enhance the programs outcomes?
9. Do you have any case studies that demonstrate how KEGs has benefited non-academic learners and children with challenging behaviours?
10. In your opinion, what strengths does MDC bring to the KEG's programme:
 - a) Facilitator support and knowledge.
 - b) Individual schools needs.

- c) Environmental sustainability.
11. Would you be able to sustain KEGs without MDC support?
12. Anything else you would like to comment on?

Parents/Students

1. What are the good things about having a fruit and vegetable garden?
2. What are some of the things you have learnt as part of the Kids' Edible Garden programme?
3. Have you made any changes at home because of the KEG programme?
4. Have you had any other support from other people or groups as part of the KEG programme?
5. What could be done to make the programme better for you?
6. What does having an edible garden mean to you?
7. Is there anything else you would like to comment on?

Key Findings

Lead Teachers, Principals and Facilitators

Question 1:

What part of the curriculum does the Kids' Edible Garden fit into your school?

The primary school Principals, lead teachers and facilitators were asked what part of the curriculum they felt KEGs fitted into at their school. 53% of the respondents believed the KEG's programme provided opportunities to connect the programme with all parts of the curriculum.

"Under the enquiry umbrella of science, social studies, health; Reading and literature are shared using books, poetry, websites...Thinking hats, diagrams, blends and even art. Water colour paintings for an exhibition, line drawing and practical planting."

"Healthy communities, healthy living, how things grow ... it covers it all".

"It fits into everything. Reading, writing, maths...it all fits within the garden".

"It's actually across all parts, even art to a lesser extent".

Many of the respondents were excited to have a programme that offered flexibility and endless opportunities to use the garden as a learning tool. One testing factor for staff was the ability to think "outside the square" and use some imagination.

“We also cover the Maori aspect and links using the garden, the garden’s use is endless, it just needs imagination.”

In many cases Enviroschools was being used as the overarching umbrella for KEGs, linking the two programmes together.

“All our programme fits under Enviroschools framework. If we can slot the garden in somewhere we do it.”

“Mostly science, thinking umbrella, enquiry unit, under the Enviroschools focus.

Good links with learning, nature and the environment. It is a programme that could capture all learning”.

Question 2:

Do you use the Kids’ Edible Garden programme to deliver any of the key competencies?

The New Zealand curriculum consists of five key competencies that relate to the curriculum. The five competencies are:

1. Thinking.
2. Using language, symbols and text.
3. Managing self.
4. Relating to others.
5. Participating and contributing.

All of the principals, lead teachers and facilitators use the KEG’s programme to deliver the key competencies but in differing amounts.

“There is different weighting but all of them are there”.

“Manage self, especially the behaviour of the children. Its hands on, kinaesthetic activity, making it easier for these children to focus. Plus thinking; using language, symbols and texts; relating to others; participating and contributing”.

“Yes we do. Manage self, cooperation, relate to others, participate and contributing”.

“All key competencies are touched on within the KEG’s programme.”

“Definitely. Students make their own lunches from time to time so they are managing themselves; they work as teams so need to work with one another, use symbols.....”

“They are all related, down to cooperation skills, text, relating to others and participation.”

“..especially team work and managing self.”

The age of the students was another variable on how much emphasis was placed on the key competencies. It was found it was important for students to be outside in the gardens to build the enthusiasm and curiosity to learn more about gardening.

“All competencies are covered depending on the age group. The older students definitely, the younger ones have more fun so there is less of a focus.”

Two of the facilitators made special reference to how they use the KEG's programme to capture and complement the key competencies.

“Definitely. The programme complements the key competencies, for example Science – bugs and insect; Health – 5+ day etc”.

Question 3:

Do you use the Kid Edible Garden programme to integrate in health education?

Many of the interviewees made reference to the life long skills KEGs is providing for their students, encouraging them to become more responsible for what goes into their lunches at school and learning new recipes that can be shared with the family at home.

“It's life, life skills” All senses are used - taste, smell, visual and touch. The children are connected to what they are doing rather than abstract learning, they get practical skills.”

“Definitely. We hammer in food miles and encourage buy local.”

“The year 5/6 seniors learn to read labels, just the simple stuff like fat, sugar and fibre, so they can start managing their own health.”

“Yes, very much. Promote and encourage healthy lunch boxes, healthy meals.”

“Yes, healthy eating, look after and provide for self.”

“.. it fits straight in. Healthy living, healthy eating, contribution to the community.”

“.. it's a key link.”

Connections with other programmes and campaigns provide opportunities to integrate the gardens into the health curriculum and health education.

"I feel it works best with teachers involved with health. The TAB² team (senior students) are not directly involved with the KEG's programme but they still use the garden. For the juniors who are involved with the program, they learn lots about health."

"When the Life Education bus visited us we were able to link so much into that programme too.....friends, digestion, photosynthesis....it all linked with our garden....."

"Yes.... . We relate our needs to the garden when using the Life Education Trust. Our basic human needs discussed; shelter, food, oxygen, exercise, love, community connections by sharing the garden..."

"Where possible we do, sometimes it's alongside what we are teaching and other times its part of the teaching tool."

"Things like the 5+ day campaign helps to strengthen the programme and links with health."

Only one interviewee mentioned that they are not currently using KEGs to integrate health education but felt this would change as new targets were set.

"Not at present. Investigate healthy eating unit possibly at a later stage as our set targets are already in place."

Healthy eating was the greatest link made between KEGs and health, but there were other opportunities being captured to link the gardens with health in very inventive ways....

"The children made up a poem "Garden, our special place", it's a nice place to go with friends."

"We encourage all sorts of health links. One we have recently included was looking at other plants like Aloe Vera."

While others felt healthy eating needs to be advocated for and encouraged

"It is, but healthy eating still needs to be pushed."

² TAB - Tomorrow And Beyond

Question 4:

Is the Kids' Edible Garden programme in your schools strategic plan?

Majority of schools who are involved with KEGs are also an Enviroschool. New schools that join the programme are required to complete "Me in my environment" and "living landscapes". This enables the school to be more aware of the bigger picture and provide a greater depth of learning.

Enviroschools has become the overarching umbrella for KEGs and as a consequence Enviroschools, not KEGs, is mentioned directly in many of the schools strategic plans.

"Its business as usual, it falls out under Enviroschools."

"Part of our school vision is "Linkwater life long learners."

"Within the curriculum goals and under the Enviroschools umbrella."

"Not specifically, it is part of the Eco component of the plan but not specifically with KEGs."

"Not specifically but it is part of business as usual. Enviroschools enquiry unit is our umbrella to the KEGs programme."

Health Promoting Schools provides another opportunity to capture KEGs in the schools strategic plan

"Part of our school culture is to link as much as we can to Health Promoting Schools. To do this we get lots of support from XXX (HPS advisor) and our parent committee."

Some schools preferred the KEGs programme to become business as usual, a whānau ora concept, linking with different units and identifying opportunities to incorporate the gardens whenever possible.

"It's (KEGs) not mentioned directly but it does fit in."

"We want KEGs to become business as usual. The focus during 2012 was to develop and build the new garden..."

"KEGs is attached within the unit planning, for example nude food."

"It's (KEGs) in everything, its business as usual so there is no need to pull it (KEGs) out separately."

"We looked at cultures and flags and used the garden to celebrate culture and diversity, looking at different foods....the children see it all as one, not separated...it's the whānau ora concept."

“Not directly mentioned but does get incorporated as part of other areas; Improve the physical environment; Improve safety.”

“Currently the lead teacher and I discuss topics at the start of each term and look at ways it can fit within the garden”.

“It (KEGs) is, it’s in the Annual Plan.”

Question 5:

What changes would you like to see made to the programme to suit your school needs?

All responses from the larger schools interviewed indicated they would like to see the funding distributed to schools on a pro rata basis. Students have expressed to staff at these schools a need for more time in the garden. At present they have as little as two 30 minute blocks each year with the facilitator in the school garden, and if they happen to be at sport, ill or at school camp etc, this time is not made up.

“Funding. If there is not enough funding it makes it difficult. At present there is not enough time and opportunity to meet all the objectives as the kids only get 2 afternoons each year in the garden. Fund on pro rata basis of number of children on the school role so can build on the student’s interest and skills.”

“Equal funding for time would make it more purposeful and would allow the programme to flow into the classroom better. Funding per student. As a school we evaluated the KEG’s programme with students and staff at the end of term, it demonstrated a need and a want for more time in the garden. We get the same amount of funding as smaller schools so the students don’t get much time with the facilitator in the garden.”

“More hours and funding per capita.”

“More flexibility (with time). Use the hours to suit our programme...reduces time during winter when it’s quieter and boosts the time during the warmer summer months.”

“Continue the programme through the entire school, currently there is only enough time (funding) to allow the junior school to take part.”

“Funding per capita would be a great idea.”

No changes are required to the KEG’s programme. This was mentioned a number of times throughout the interviews.

“KEGs fits in really well just the way it is, so no changes please. The programme itself takes up as much time as it needs to; its well organised and runs well.”

“No, not really”

“Our year 1&2 classes are involved with KEGs, in year 3&4 the leadership develops and by year 5&6 the students are enviro leaders. Senior children are now working with the junior syndicate, so we have reached the stage where we have implemented a full cycle of the programme....now we are at this stage I wouldn't change anything.”

“The freedom in the structured programme is very helpful, it adds flexibility.”

Retention of facilitators was highlighted, along with an increase in facilitation hours to cope with the growing programme.

“Facilitators need to be maintained. We are unable to retain our facilitators. We need continuity with a facilitator as the fast turnover we have is disruptive to the programme.”

“We have fast turnover of our facilitators, they seem to change yearly...this is difficult for everyone involved. It would help for facilitators to realise how big the job is before they take on the role and have some training with the teaching aspect so the programme links well through an education lens. I'm not sure how we can retain facilitator's long-term....”

“Increase facilitation time so enthusiasm is maintained as the children go through the year levels.”

“Use trained gardeners rather than teachers. There is a lot expected of the facilitators, maybe need to get some help or support from parents or not do so much with the programme – maybe look at cutting the programme back. It takes time to get the children involved and 20-30 minutes is not enough time to get through one group and then get a new group of children 20-30 minutes later.”

“We are not employed for many hours but have lots of preparation and extra jobs in the garden that need to get done like, tie trees down, compost, maintain the garden, weed, water. We have 5 plots at the school plus an open orchard, worm farm, seed rising, cooking etc and it is just too much to do it properly. I get all the jobs completed ok but not great.”

“More time. I get 2 afternoons each week and need to get through 500 students in the year. Some only get 2 sessions of 30 minutes each so they all miss valuable sections....”

“Funding for our lead teacher to be released and work with the facilitator and the children.”

“More support (funding) for school staff. It's important that we keep a person in the school to keep it at the forefront.”

A couple of the responses also commented on having seed banks and sharing seeds and seedlings with the wider community outside school.

“A more purposeful seed bank.”

“Link with other schools and share seeds/seedlings with others in Marlborough so they are better suited to the Marlborough conditions.”

“plants to become available to the school community to plant at home”

Question 6:

Has Kids’ Edible Gardens assisted with links between other schools?

Half of those interviewed made comment of how they would be interested in improving the links with other schools. The main reasons they provided for not doing so at present is the lack of time they have to arrange tasks with the other schools and time to become familiar with the KnowledgeNet website

“Not that I am aware of. It’s not like we don’t want to, time is the issue.”

“Not really, possibly this has more to do with the distance that schools would need to travel to get to us...we are isolated really.”

“We are keen to share seeds but how? Maybe this is something that could be looked at.”

“We had 3 other schools in to visit during 2012; the schools shared idea’s to extend and develop the gardens, students took ideas away with them.”

“No not really, we haven’t been great at this. We get so bogged down with our own school needs and time is already stretched.”

“No, time and opportunity lacks as paid to do 2 hours but spend more than 3 hours onsite plus prep time etc

“Share resources: It’s difficult with the time we have, its just too busy and not enough time. There is a need to keep a coordinator that does this.”

When prompted about using KnowledgeNet as a possible tool to assist with linking with other schools it was interesting to hear this was not being used, primarily due to the lack of time they have to become familiar with this site and understand its full potential.

“We could benefit from relationships with other schools. KnowledgeNet is not being used at present; it’s just a time factor. Maybe facilitators could bring surplus seeds with them to meetings and share them then. KnowledgeNet could mention the surplus seeds we have but the same problem still comes up – how do we get them easily.”

“Not really. Knowledge-net not being utilised, just haven’t had the time to play with it. Some schools look at each other school gardens to help with their planning and set-up of a new garden plot.”

“no, not as yet maybe we could use this when we become more familiar with the programme. Its like everything else I suppose, just finding the time to play with it and understand what it could do to help us”

It was encouraging to hear schools are supporting one another with visits and the sharing of knowledge gained in the set up of the school garden and the interaction of students between the schools to explain how they have worked through their garden set up. 45% of responses made comment to supporting the garden visits.

“It’s given us the opportunity to share knowledge. Our Green Team developed the vision mapping and visited both xxx and xxx schools.”

“3-4 other schools have been to visit our gardens and we have sent our leaders to other schools also.”

“We have shared ideas with other schools and this has helped to build some relationships.”

“We did visit schools to get ideas on what we could do.”

“Other schools have visited to assist with their planning. Children from other schools visited and juniors were provided an opportunity to become leaders.”

One school did mention they have assisted another school in their cluster when their garden was vandalised

“We do support one another within our clusters if any issues occur. When xxx garden was vandalised we helped out “

A couple of comments made indicated the EnviroSchools programme had assisted with links between other schools more so than the KEG’s programme.

“Our older children (who don’t take part in KEGs) may do more, but our junior school (who take part in KEGs) not so much”

“The EnviroSchools focus has allowed more communication and interaction with other schools.”

Question 7:

Has Kids' Edible Garden's assisted with links between the wider community?

Wider community that do not have children attending the school

Interaction with the wider community was acknowledged as a great idea but it is not currently happening. Linking with community took up valuable time and the school galas/fun days tended to be the main point of contact with the community outside the school. There was very little awareness of the backyard mentoring programme available through the Marlborough Community Hubs for families to obtain support to set up and maintain a garden at home, but all thought this would be an ideal link between their families and the community.

"Not particularly. We envisage sharing produce with the wider community but as yet this is yet to really happen."

"As a school we do try to get out into the school community and share produce but there is room to grow here. This could be the stepping stone to expand into the wider community..."

"This may be an area we could develop, support and encourage initiatives at home maybe" (Unaware of the Backyard Mentoring Programme)

"We have fun days at school and we do use the gardens then. The wider community know they can access the garden at any time but the thing is most people out here already have gardens and know what to do anyway."

This question encouraged schools to think about new possible connections with the wider community.

"Maybe we could get the preschool next door involved and share our garden with them, possibly have a shared breakfast and invite families so we can develop a relationship with the preschool families earlier."

Everyone made reference to distributing surplus produce to the school community and supporting families during difficult times. The school community are encouraged to become involved with the gardens, share their expertise with the students and participate in celebrations and harvest events.

"Strengthen families and the community. Any excess is shared with the community and families."

"We have a parent who is also an ex orchardist. He has come in to train senior students on pruning etc and they then train younger students in the following year."

"We did a community hangi using veges from the school garden. Sometimes we sell surplus produce and we do support particular families in hardship."

"We have had the local church in to look at our raised beds."

"The tree planting of the open orchard was a community event with community getting

involved. The community and parents are very active but as many travel a long way to the school it's difficult for them to help tend with the garden."

Businesses and agencies

All of the schools have made connections with businesses and/or agencies but at varying levels. Most schools have interacted with businesses to purchase tools and equipment. Purchases have been discounted with some manual labour provided at times, to assist with the job at hand.

"We try to link with our community and pull them in. We recently purchased 30 sets of tools. The shed is being painted but we did have to part with money to purchase the class sets of tools."

"Mitre 10 and Bunnings are keen to be doing stuff with the school. We need to purchase the items we need but get good discounts and they are very supportive."

"Businesses have helped us. Recently we purchased 30 sets of tools; we got a good discount plus support to repaint and help set up storage areas. Other support includes free delivery of equipment, plus donated timber and hardware"

One school has successfully connected with agencies and businesses across Marlborough, spending time and putting in a lot of effort to build and nurture relationships with the key people. The doors at the school are open to anyone who wants to assist the school and the families in the school. Celebrations held on a regular basis to acknowledge the agency and business.

"It is so important to make wider links outside of the school, to identify those who can help in the community"

"To build our new garden we needed help. The Salvation Army has been absolutely amazing; they gave up their time to build our children their garden that they (the students) had worked hard to design..."

Overall schools are very open to receiving help whenever it is offered to them....

"Outward Bound built our garden; they have been great to us."

"Workbridge has helped our caretaker. Our students are keen to sell excess produce at the local market but this is yet to happen."

Schools have begun to contact newspapers directly to share their stories and showcase their school with the wider community. At times the gardens are utilised to combine events often in conjunction with services like NMDHB Public Health Service.

"Publicity in the paper has helped increase awareness in the community. We also did a breakfast with NMDHB, I know this was separate to KEG's but it did link."

Often EnviroSchools is the main link between the community and the school. Kids' Edible Garden programme provides another opportunity to nurture these links.

“Many other businesses and organisations assist our school, it’s so important to connect with them, always make them welcomed and say thanks...KEGs hasn’t been the driver to develop these relationships but it certainly has given opportunity to get involved....”

“Produce is sometimes sold at the school gate, but nothing direct. The Tomorrow and Beyond (TAB) team may do some more of this for example bring in other experts.”

“EnviroSchools probably does this more...”

“No not really but EnviroSchools has. We do put recipes into newsletters for the wider community.”

The Marlborough wine industry has been beneficial for one particular school where they have sourced supplies and looked into recycling and reusing as much as possible.

“The vineyards have been good, they give us “grape mark” (dried grapes to put on the gardens), posts, old irrigation pipe...”

Other community programmes

The collaborative relationships that Marlborough District Council works hard to develop have been welcomed by the schools involved with KEGs. Both the Marlborough Community Gardens and the Kids Can Cook Kitchen have been well received as supporting tools to the KEG's programme, especially the cooking demonstrations. The main limitation expressed was the cost to get the Kids Can Cook Kitchen back into the school with one suggesting the programme needs to be adapted to make the programme more hands on for the children.

“Kids can Cook mobile kitchen and xx supported the facilitator training but is not well utilised at the schools because of the cost, the kids do not get to do the cooking, its more just a demonstration, and the best way to teach kids is by letting them do it. As facilitators maybe we need to provide feedback and evaluation to xx re the delivery of Kids Can Cook to make it work better for the kids.”

“We did have xx out to visit and he made some great recipes using our produce and made great use of our cooking box.”

“xx looked at getting xx back but we didn’t realise it was going to cost us so it just didn’t happen.”

“xx was great. He used seasonal, out of the garden produce and easy recipes.”

“Seed raising workshop with Marlborough Community Gardens; cooking demonstration with xx; Potager gardens at Pollard Park.”

More schools are becoming aware of the extra services Marlborough Community Gardens can provide and the support they can offer to schools.

“Yes, with the wider community and community gardens. We have had support from the wider community and example being an organic grower came out to do a pruning demonstration.”

“DHB and Marlborough community gardens have been helpful.

Marlborough community gardens helped when school vegetable garden was vandalised to replace produce and to visit their gardens.”

Question 8:

Are there any agencies you feel need to be involved with Kids’ Edible Garden’s to enhance the programs outcomes?

Schools feel supported and tend to have relationships with other agencies across Marlborough or know how to access the support they may need. Majority felt there was no need for other agencies to be involved with KEGs. If a need is highlighted, schools are already aware they can contact the KEG’s coordinator or the Health Promoting Schools Advisor if they would like some assistance.

“The programme is working really well and is well resourced. I love the plant to table concept.”

“xx (HPS advisor) has so many ideas. He keeps us up to date with what’s going on and who to contact if we want to do something. The health calendars have been terrific...they help with this to”

““The coordinator always makes herself free to help us; she never makes us feel like a burden, she’s super helpful.”

The connection between gardening and health was identified, indicating the partnership between the DHB and KEGs was perceived as important.

“Maybe more involvement from the DHB with healthy eating and cooking.”

“Health agencies, health protection. They could support with safe handling of compost, potty mix, and safe water.”

“Keep the health board links to encourage healthy eating, they have been great giving us cooking tools, bags, seeds and this health calendar.”

“Any health professional, the children always respond well to visitors “

With a few of the facilitators also being employed as a teacher aide it became obvious they were able to look at this question and the opportunities KEGs brings to teaching children with learning &/or behaviour difficulties. This is probably not the responsibility of the KEG’s programme could be a concept for special education to scope further.

“xx has a dual role with being our facilitator and works with our special and learning needs children, a good fit. Maybe more connections with social workers, maybe they could use the gardens too?”

“Social workers especially in the low decile schools, so they can see first hand what KEGs can do.”

Becoming more familiar with the Marlborough community gardens and further develop the relationship between community gardens and KEGs was suggested. Many were unaware of the backyard mentoring programme and felt this would be an option for families to link with.

“Marlborough Community Gardens, unsure who else...”

“Probably connect with other programmes better, it’s a time thing there just isn’t enough of it. A visit to the community gardens would be good”

“I suppose it would be nice to help transfer knowledge and support into homes and families to set up gardens....I wasn’t aware of the Backyard Mentoring Programme until today so that could be one idea....maybe talk with the community gardens...”

“Not an agency but get parents/caregivers involved with the programme so they can help their child to take ideas home.”

“Not really an agency, but find a volunteer or helper who could work beside the facilitator and assist in the garden. Grandparents in the garden could be an idea...they have more time, often more skill and can help them feel good too BUT we would need someone who is consistent, who will routinely come in so we know when they are around....”

“Native edibles linked with edible gardens, not sure who could teach this or who best to link with? Develop community awareness on harvesting private plants and the ones in the community. What ones are safe to harvest and eat...I suppose this would probably be council but a different part, or the community gardens, not KEGs”.

Question 9:

Do you have any case studies that demonstrate how Kids’ Edible Garden’s has benefited non-academic learners and children with challenging behaviours?

A couple of case stories were shared by the facilitators and lead teachers. The over whelming statements indicated the gardens created equal opportunities for students, regardless of their academic ability. The gardens explored opportunities to highlight the strengths of students to build confidence and enhance self esteem.

“Behaviour children are more engaged in the garden setting over the classroom. They need more hands on learning, it works. It’s child centred and works for them and we as teachers need to find ways to do this....This is a key driver for our outdoor learning classroom...”

“There is a regular group of children who get into the garden at lunch times. Our caretaker is a very active participant in the garden and he encourages some of the children to be involved with the maintenance of the gardens.”

“It has engaged with all children to enhance academic learning.”

“We have a child working with an RTLB. It has engaged with xx learning. We have seen xx develop confidence, write recipes out off his own drive. His writing has really developed and he is so much more confident. The whole experience for him is great, he does it, makes it, eats it and writes it....a real positive experience”.

“We have an ORS student who is always in the garden, he loves it!”

“All the children are engaged, there are no barriers in the garden, they can all do it...”

“The programme hooks in all children. Our facilitator makes it interesting and captures all the children”.

“We have a senior boy with learning difficulties. He spends time in the garden during his lunch breaks, he thrives in the garden.”

“The garden is a bonus for our students with special needs; it’s a safe place/neutral zone. I feel the special needs students need more time in the garden as I have seen it help with their learning and development.”

“Some children are very scared to try food from the garden, but the peer pressure is good and eventually most try the food.”

“The garden does help those children with more practical learning skills. It becomes their time to stand out and shine in front of their peers and teachers. We have students who are very good with photography or even digging a hole, they get to show what they are good with and I see their confidence improve immediately.”

“All the children are involved, not just the more academic learners in the classroom. It evens out all the children; they are all on the same playing field”.

“The children with challenging behaviours are my best workers in the garden. They respond in a positive manner to all the tasks I give them in the garden...they dislike the formal classroom setting...they seem so much more relaxed outdoors doing jobs.”

Question 10:

In your opinion, what strengths does Marlborough District Council bring to the Kids’ Edible Garden’s programme?

Marlborough District Council has been the lead agency in the KEG’s programme, with a programme manager who oversees the quality of the programme and advocates to Council the many benefits it provides. Strengths identified include active listening, good communication, and flexibility in how the programme is delivered. MDC are supportive, adaptable and understand teaching which enables the programme manager to comprehend and implement the suggestions schools provide.

"Its personal, flexible has good planning and funding, these are so important."

"There's support for facilitators and links with Enviroschools, it's excellent".

"Unsure, but I know there is loads of support from xx and MDC".

"a paid facilitator is always helpful".

"The programme is great, they listen to us ask for feedback and we can adapt the programme so it's flexible."

"Their strengths are huge".

"Gardens would not be operating without facilitators."

"Communication and education is top notch. Information is always out quickly and responded to fast."

"So many plus's for our school to take part in KEG's. KEG's ads value to what the school needs to do".

"MDC has been amazing, they provide everything. Funding, resourcing, manuals, tools, cooking kits..."

"The support for the coordinator on how it could work really does help. She provides clarification with regular contact and catches up with staff regularly as we do have high staff turnover and we need to capture them."

"The funding for teacher release time helps us being a small school so the teachers can meet and share ideas."

"Communication is great, it's regular and reliable. Knowing what resources are available. Wider approach linked with Enviroschools. It removes the guess work and makes planning for teachers easier."

"xx is open to ideas and release time to investigate ideas. They are very supportive.."

. "They are enthusiastic, keep the programme alive with funding, provide expertise when we need it and motivates us for the programme".

“Excellent 20/10 in all aspects. MDC is wonderful.”

“The whole programme from set up, resources and support but now with the programme growing facilitator time is thin.”

“Training sessions to get facilitators together and networking with each other each term.”

“The coordinator is a great support, she is always there to help and assist with learning the ropes”.

“MDC assists to create an environment that links environmental sustainability to KEGs.”

“Loads of supports, it’s great. We can pass on our ideas and they are listened to.”

‘By providing a facilitator and coordinator we are part of the bigger picture. The coordinator helps to keep us (the facilitator) on the ball with reports and assists us (the facilitator) to maintain a quality programme even when the quantity increases. They take our ideas and suggestions and adapt the programme or help us adapt the programme to suit our schools needs and what we want to do with the programme.’

“Without MDC funding KEG’s in my opinion would not survive. The support from council enables a consistency in resources, sharing of knowledge and training for facilitators. The teacher training is also made possible with teacher release funding. xx provides great support to the coordination of the KEG’s programme with the key links and umbrella support from Enviroschools.”

Question 11:

Would you be able to sustain Kids’ Edible Garden without MDC support?

Facilitators are key to the successful implementation of KEGs. Facilitators are a vast support for school staff, and are vital to the success and continuation of this programme. All feedback acknowledges the tremendous skills and understanding the facilitators have provided they can be retained to maintain reasonable consistency for all school staff and students.

All schools highlighted the desire to have a sustainable programme as positive results were evident. However MDC funding contribution is paramount to the existence of KEGs. Without Council support the majority of schools would not be able to fund facilitator time.

“If MDC pulled out the programme we could continue provided facilitators were funded. We (the school) could not fund facilitators.”

“Facilitators are the key, they are needed.”

“The programme offers important life skills that we can’t afford to loose in society. We as a school want to grow the programme and strengthen KEGS, so we could possibly sustain some components, but funding does help to keep a facilitator.”

“To sustain the programme continue to pay a facilitator, it is so important.”

“We tried one year without MDC support, the garden was hard to maintain and the focus and drive was lost. A facilitator is definitely needed”.

“Sustainability of the programme relies on maintaining a facilitator. The programme wouldn’t work if a facilitator was not provided.”

“Without MDC support KEGs may not be able to survive. We need the release time and facilitator time...”

“It would be very difficult to maintain KEGs without resources, a facilitator, to make it happen.”

“No I do not think so. At present as the facilitator I am thin on the ground and only touching the surface. There is not enough time to look into sections in depth.”

“For sustainability a paid facilitator is needed.....”

“The regional coordinator and school facilitator are needed. We can source other resources but we NEED facilitator time and the coordinators support.”

Enviroschools has become the umbrella to support KEGs and could possibly be the answer to future sustainability. Two of the six schools interviewed have begun the Enviroschool process with all staff committed to KEGs. They are confident they could sustain KEGs if they had to, however some components would be lost.

“We would be sustainable. Teachers would step up but there is a certain financial obligation for MDC to commit to the programme. KEGs is a big part of Enviroschools and the vision of xxx school. If MDC could only fund a small area then I would recommend it funding a facilitator.”

“Not sure, but possibly would maintain some aspects under Enviroschools.”

“Yes we would. We (our school) have all brought into KEG’s and we have linked it with the health teacher to support the lead teacher. In 2011 KEG’s was a separate unit to promote it, now it is part of every day. We have a wall in the school hall to showcase what our school is doing so all parents and children can be reminded what KEG’s and Enviroschools is all about and what is being highlighted in the school.”

“I am so lucky to be part of the programme, it’s exactly what our school needs, very beneficial and we want to always run it, so yes I am sure we could keep the programme going.”

Question 12:

Anything else you would like to comment on?

As highlighted, the facilitators are a vital component to the successful delivery of KEGs within the education environment. It's important these individuals feel the job is achievable without any unnecessary pressure, especially when the school they are working with is located in an isolated area.

“We (facilitators) are recognised for what we are doing but some more support is needed now that the programme is bigger and keeps growing. It’s difficult to fit everything in with other life commitments.”

“As the programme grows there needs to be more time for facilitators so facilitators do not get worn out.”

With staff welcoming KEGs to help deliver the school curriculum. The unintentional consequence has led to a positive life style changes within the wider community along with children led initiatives within the garden. This has potential to reduce burden on health care with improved diets, mental wellbeing, physical activity as well as supporting the environment.

“Encourage all teachers to get out into the gardens with the children rather than leaving this to the ones who have an interest already in gardens.”

“Whole school requests are coming in where the whole school takes on the ownership and pride in the gardens rather than parts of the process or just certain classes with some children showing less respect for the gardens.”

“See learning ownership by children makes it all worthwhile. The children drive it and take ownership”.

“This helps provide for a community that will be healthier in the future by reducing the barriers:

“There is a definite place in society for KEGs and it needs to grow and provide opportunities for children and the next generation.”

“We want to take our orchard to the community. Our vision to be the catalyst to change our communities’ behaviour is huge but we can try”.

“Expectations on healthy eating have to improve. We encourage the children to talk the talk at home and take ideas home with them. We need to impact the family, encourage families to look at having a garden and improve meal choices”.

Parents/Caregivers and Students

Question 1:

What are the good things about having a fruit and vegetable garden?

(Some students provided more than one response)

Students

Children are more likely to try new foods and enjoy the flavours of them if they have been actively involved with caring for the garden and fruit trees.

<i>Taste</i>	27 responses
Some of the words students used were <i>“yum, juicy, you get to eat yummy foods, refreshing salads and you can make juices and meals.”</i>	
<i>Food is cheap/free; There’s always something to eat</i>	25 responses
<i>Health benefits</i>	12 responses
<i>They look good and make the school look nice</i>	3 responses
<i>Water fights and getting dirty</i>	3 responses
<i>It’s fun to be outside</i>	3 responses
<i>Donate to those in need</i>	2 responses
<i>Can sell stuff and make money</i>	1 response

Parents/Caregivers

Of the 23 parents interviewed, 11 indicated they looked at the savings having a fruit and vegetable garden provides.

“Use land to make it look better. Gardens look nice and help feed us...”

Approximately half of the parents were keen gardeners with access to a vegetable garden while the remainder openly admitted they were not keen gardeners or had no time to tend to a garden.

“Looks nice if its cared for. Our one at home isn’t so we get my father in law in to look after it, I’m just not a gardener and either is my husband. Maybe the kids will be better at it than me”.

A link between growing vegetables and increased consumption was evident with nine parents making reference to their child enjoying raw vegetables from the garden.

“He loves raw veges, they never make the kitchen, even broad beans and brussel sprouts”.

“My kids eat the vegies straight from the garden”.

Using the gardens as an opportunity to spend valuable time as a family, working together, communicating and reconnecting.

“Family visits to a garden to pick produce on the weekend, cause the garden is open to the community”.

“Something my children can help me with. Family time, a good place to talk”.

“Healthy eating, where food comes from; Children and see where food comes from. That it doesn’t come from the supermarket.”

Question 2:

What are some of the things you have learnt as part of the Kids’ Edible Garden programme?

Students

The enthusiasm from the students when asked what they felt they had learned from the KEGs programme indicated they all thoroughly enjoy the programme and the high engagement level was maintained.

<p>The highest number of responses from the children on what they felt they had learned was:</p>	<p><u>Planning/Planting</u></p> <p><i>“I know how to design a garden, when and how to plant and when it’s ready to pick/harvest/eat.”</i></p> <p><i>“We designed our garden”.</i></p> <p><i>“What plants look like, what they will grow like what a cucumber plant looks like and a broccoli plant, stuff like that”.</i></p> <p><i>“When the food is ready to pick and eat and when it’s going to seed.</i></p> <p><i>“Cleaning a space to plant”.</i></p> <p><i>“Companion planting”.</i></p> <p><i>“How to space plants”.</i></p> <p><i>“How deep to plant”.</i></p> <p><i>“The size of the pot is important. If it’s too small it’s not good for the plant so need to change the pot when the plant gets bigger.”</i></p> <p><i>“Planting rotation.”</i></p> <p><u>Eating</u></p> <p><i>“Lemonade trees taste like lemonade”</i></p> <p><i>“Cooking, how to cook, great recipes; trying new fruits and</i></p>
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	<p>vegetables”</p> <p><u>Management</u></p> <p>“Caring for plants”.</p> <p>“ Weed management”.</p> <p>“Tool management”.</p>
<p>Curriculum</p> <p>(In order of highest responses, other things the students felt they had learned included).</p>	<ul style="list-style-type: none"> • Seasonal plants and lifecycles; Food chain. • Health. • Science - Oxygen vs CO2 ; Photosynthesis. • Irrigation ideas; When and how often to water; You do not water the leaves when it is sunny. • It teaches us how to care for the environment. • Team work - Share ideas with my class.

Parents/Caregivers

On a regular non-KEG’s school day they rarely heard about what had happened at school and they had to ask all the probing questions to get feedback from their child. On KEG’s days their child would arrive home to tell them all about their time in the garden, what they had grown, cooked, tried/eaten, often with suggestions that they could use at home. In many cases the parents/caregivers noted their children had begun to eat fruit and vegetables, even tried new foods.

All parents/caregivers made reference to their child’s excitement and openness when arriving home after spending time in the garden at school.

“Worm farms, we get told everything”.

“How to carve up apple, it’s a nightly event now”.

“I hear lots about what is ready to eat in the garden and recipes they have made at school”.

“The programme brings all threads together and connects them – life long skills like growing, cooking, compost beside science and the technical information that they would normally learn in a classroom, photosynthesis, solar etc”.

Its hands on learning, very practical.

“They are now trying new foods, I think because they are being exposed to more vegies and their peers are trying them they feel like they also have to try them. At home this would not happen”

“ xx suddenly grew interest in our home garden.”

“My children often talk about how healthy they can be and why they need to eat vegetables and fruit”.

“She eats more vegies now...”

“Cooking taught at school and they want to make the recipes at home”.

“My son disliked tomatoes but now loves to eat home made tomato soup”.

“The question to “where does food come from?” has been answered”

Question 3:

Have you made any changes at home because of the Kids’ Edible Garden programme?

Students

Everyone loves to eat and it certainly in no exception for children. Over the generations the skill of cooking has deteriorated with a growing number of adults unable to cook nutritious cheap and quick meals at home. The exciting activity that has been identified from this study was children wanting to cook at home and are now encouraging their parents, caregivers, grandparents etc to all be involved.

“I cook the recipes at home. Leek sauce was yum.. Sometimes I have to ask lots to cook cause I’m to little to do the hot stuff”.

“I liked the strawberry salad and so did my mum and dad and my sister”.

“We cook lots more now”.

“Broad bean dip was yummy”.

“I got dad to grow beetroot and nana let me watch her cook it and put it into jars”.

“Nana grows strawberries now because I love them”.

“I make my own lunch now and I don’t have chips anymore or juice”.

“I like helping mum to cook, its fun.”

The children made reference to tending the home garden. They felt confident to share ideas and suggestions and had become actively involved with its maintenance and care.

“I can share ideas when planting at home (spacing)”.

“We grew pumpkins at home from our seeds”.

“We made paper boxes at school and planted seeds in the dirt so we could take them home”.

“I water my garden after school”.

In many cases the students identified the KEG's programme and Enviroschools as one programme with many talking about the environmental aspects to gardening.

“I made mum put the ash from the fire onto the garden because it's good for it.

“At home we now reduce, reuse, recycle”.

“Composting happens now. I got mum to buy a bucket and I tell my big brother off if he puts his leftovers in the bin”.

“We have got a worm farm now”.

Parents/Caregivers

The largest number of replies from parents/caregivers was they are using the recipes at home and have more gardens.

“My children ask for salad sandwiches now rather than jam ones. They are more aware of healthy eating. I can't say this is just from the programme or if it's a combination of me nagging, school encouragement, them getting older and KEGs”.

“They are more willing to try different foods”.

“My boys love gardening, we have a garden at home but we had to build another one just for our boys”.

“We have made raised beds for our kids”.

“Seeds have come home for us to grow”.

“They plant the seeds at school until they spout and then bring them home. They have to go in the garden of course”.

Once again the connection between KEGs and the Enviroschools programme was identified with parents/caregivers discussing the changes made at home resulting from Enviroschools rather than KEGs.

“Composting awareness was raised by my daughter and she made us start our own compost at home”.

Scrapes are now being recycled and given to our chooks. We have been made to become more aware at home, it’s quite funny being told what we need to be doing by our child, it’s certainly a change....”

“You don’t need to use spays pop, you can plant special plants to stop bugs” was what my son told his grandfather.

“ I got nana and poppa into worm farms”.

(Eight families indicated they have started worm farms at home).

Question 4:

Have you had any other support from other people or groups as part of the Kids’ Edible Garden programme?

Students:

Students were able to make a list of people that have supported them, although many of the ones mentioned were involved through the Enviroschools programme rather than KEGs, indicating the strong link between these programmes and how they complement one another.

The most common groups and people listed included the facilitator, other teachers, the school caretaker, Council, Bunnings, Mitre 10 Mega, Timber yard, other students/ peers (mainly senior) and Wairau Worms.

Parents/Caregivers

There was little awareness of other support groups in the community. Families had called on the support of their wider family or close friends if they needed ideas or help. Only five people had heard of the Marlborough Community Gardens.

Question 5:

What could be done to make the programme better for you?

Feedback was sought from the participants on what participants could be added to the KEG’s programme. Many students used this question as an opportunity to put in their “wish list”.

Students

Students from the larger schools all asked for more time in the garden. They loved working in the garden, spending time outdoors, but due to the large number of pupils at these schools they got very little time out in their school garden. In one school the students only got two, 30 minute sessions each year.

The cooking module has had positive feedback from the students with a third of the students requesting **more cooking time**. This was followed by **more raised beds** and **berry patches**.

Other minor suggestions included:

- A melon patch would be really cool.

- A glasshouse to try growing other plants.
- Plant other trees like Pacifica varieties.
- Kumara plant.
- Maybe plant capers and olive trees. We could make olive oil...that would be cool.
- Platters for the bus kids.
- Solar panels.

Parents/caregivers

The focus on more garden time at the bigger schools continued through to the parents/caregivers. They were very aware of the limited time their child/ren got in the garden, and felt this needed to be addressed moving forward.

“More time in the garden. They don’t seem to get much hands on time, they are always buzzing after having a class in the garden, they don’t stop talking”.

“More time for the children to be in the school garden. We are a large school so the children get very little time in the garden, and none of them will see the whole cycle, the progression of the produce through to harvest”.

“More gardens, maybe a garden per class.”

Overall parents/caregivers were very happy with the programme and were unaware of what else could be done to improve the programme. A couple of suggestions to connect with the community were made along with inviting parents/caregivers into the school to help deliver KEGs. The later is something that was trailed during the pilot stages of KEGs in schools however this was met with minimal success that led to the decision made to pay facilitators to work with the classes.

“Propagation sheds, expand or connect with community somehow.”

“Maybe invite parents or grandparents to the gardening classes to help out”.

Question 6:

What does having an edible garden mean to you?

Students:

The desire to **eat and cook** using the edible garden was the biggest commonality amongst students. This was followed by **cheap/free food**, with students making reference to this.

“Cool, get to eat stuff out of it, it’s fresh”.

“There is always something to eat”.

“yummy food”.

“We don’t have to buy it we just get it straight from the garden”.

“Take more produce home especially if you run out of food at home”.

Other responses expressed by students were the health aspect of fruit and vegetables, eating a healthy diet and generally overall health and wellbeing.

All of the students said gardening was fun.

“I love getting dirty;

“It’s cool looking for bugs and worms”.

Parents/Caregivers

An edible garden was perceived by many of the parents/caregivers having an edible garden meant **family time**. Working together as a family, members learnt how to communicate, function as a productive team and learn from each other. It provided parents with the opportunity to pass down knowledge to their children and grandchildren.

There were four parents/caregivers who did not enjoy gardening and saw it as another job that had to be done when they had limited spare time in their day as it was.

Question 7:

Is there anything else you would like to comment on?

Students

The students were keen to share their gardening diaries. It was something they shared with their family and friends and they took pride in what they had written, demonstrating a great link with reading and writing skills.

Students commented on inventive ways to use the school garden towards raising money.

“Edible garden canteen could be free or pay. The seniors can run the canteen with some help from grown ups or teachers”.

Parents/caregivers

“I have 4 children, my eldest 2 were not involved with KEG’s, the school didn’t have the programme yet, and they are definitely not gardeners. My younger 2 have gone through the KEG’s programme and they love gardening. There is such a big difference between the 2 that are doing KEGs and the 2 that haven’t. They love to plant and play in the garden; not that they like to eat the vegies, they give away what they have grown and love to share and teach their skills to others”.

It’s a cool school programme, relating to the children’s age and level.”

“The kids get so excited and look forward to working in the garden when it is their turn.”

“It is a great extra curricular activity...we are happy for our children to be removed from their normal classroom activities to spend time learning outdoors, this is what life is all about.”

“My son only gives me a small snippet of his day at school, but when he has been in the garden I get loads more feedback on the happenings at school for that day”.

“KEGs always get my kids talking more about what they have been doing at school”.

“The teachers don’t have time to do everything- having a passionate facilitator with great relationships with the children is hugely beneficial”.

Recommendations

Issue	Solution
Schools have a whole school approach but schools are already overburdened with current workloads.	The facilitator has been highlighted as key to maintaining the programme and without funding to support this role almost all schools, especially the lower decile schools, would have to stop delivering the KEG’s Programme.
Staff, students and parents/caregivers of larger sized schools expressed concerns around the distribution of council funding for the programme. All schools receive the same amount of funding regardless of student numbers so the larger schools are not able to offer the same opportunity to their students when working in their gardens. Facilitators at smaller schools can work with their students on a weekly basis while at the larger schools students may only get two 30 minute lessons in the garden each year.	Fund the KEGs schools on a pro rata basis, based on the number of students participating in the programme.
Working with the seasons brings about more challenges for the facilitator. The winter months can be very quiet while the summer months extremely busy.	Flexibility to use the funded hours as needed would offer the school and facilitator the flexibility to work with their students more during the busy warmer months and less in the cooler months.
Very few schools are aware of the community programmes that could be tapped into to support their families and programmes at the school.	This information would be fairly easy to collate, possibly with the support of the Marlborough Community Hubs and Community Gardens. Provide newsletters and pamphlets to schools on what is available in the community.

Issue	Solution
<p>The cooking programme has proved to be very successful with the students and parents are enjoying the recipes and supporting their children to cook at home.</p> <p>Students requested more cooking time, but the question remains who would be able to run extra cooking classes when funding is already scarce and facilitators and lead teachers are already overloaded.</p>	<p>To reduce this burden on the facilitators there could possibly be an avenue to link with grandparents and parents to help to run these classes or volunteers through Volunteer Marlborough.</p>
<p>With growing demand and pressure placed on staff there is a shortage of spare time for them to learn the capabilities of new tools like KnowledgeNet. Very few lead teachers, principals and facilitators had been able to look at their school site and see the potential of this being a great sharing tool and how it could nurture the links between schools.</p>	<p>Fund PD training to all facilitators to gain an understand how to get the most benefit from the site.</p>
<p>Overload on some facilitators to maintain gardens (weed, water etc).</p>	<p>Develop a roster system resource for the students that support garden maintenance into education, removing this work from the facilitator. Educates students to take ownership of their garden, work as a team and responsibility.</p>

Conclusion

The Evaluation of the Kids Edible Garden program has demonstrated that the program is being implemented as intended and is achieving all of its initial objectives.

Success of the Kids' Edible Garden programme in schools

The Kids' Edible Garden programme is well received by schools, with more looking at opportunities to involve the whole school. It meets its original aims of reusing organic waste and connects well with Enviroschools, with schools using the programme as the overarching umbrella for KEGs. All new schools that wish to join the KEG's programme are required to complete "Me in my environment" and "living landscapes". This enables the school to be more aware of the environment and supports a greater depth of learning. The KEG's programme is an interactive way to demonstrate a full cycle of learning - reuse organic waste, grow organic edible gardens and eat the produce grown. When looking at the strategic plan many principals made reference to KEGs being part of the schools culture. It is not mentioned directly in the school strategic plan, but rather part of Enviroschools.

Success of the Kids' Edible Garden programme in the curriculum

All those interviewed use the Kids' Edible Garden programme to deliver the key competencies with 53% of principals, lead teachers and facilitators agreeing that the programme connects with all parts of the school curriculum. There are endless opportunities to use the gardens as a learning tool, to help teach students lifelong skills that can be linked with the curriculum and deliver key competencies.

Health education and science are a large focus of the programme with the garden being used to complement these subjects within all schools interviewed. All subjects could be linked with the gardens, from maths skills to count seeds, measuring distances between plants through to literacy (stories in diaries, poems) and art. The flexibility of the programme provides facilitators with opportunities to tap into

national programme; example 5+ a day week and Maori language week. The connection with Enviroschools enables staff to complement the enquiry unit by linking with the school garden.

The benefits to schools through using the KEGs programme to assist with the delivery of the curriculum has made learning fun and real, giving opportunity for all students to shine.

Success of the Kids' Edible Garden programme in school communities

Assessing the direct impact of the Kids Edible Garden programme is difficult due to the presence of a number of variables and its strong interweaving connections with other programmes like Enviroschools. One clear message that has come from this report is students have been inspired by the programme and through the practical interactions of the programme, can see how reusing organic waste can grow edible gardens. A number of students reported sharing their knowledge with their family and encouraging them to reuse organic waste at home with many setting up their own worm farms and composting system.

Children are more willing to try new or unfamiliar foods, have expanded their awareness of healthier food choices and the importance of eating nutritious fruit and vegetables. Students connect edible gardens with eating nice tasting foods that were free or cheap while cooking with seasonal produce. Surplus produce from school gardens are shared with the school community along with seasonal easy recipe ideas. Parents/caregivers saw the savings the gardens provided and a catalyst towards family time leading to families beginning communicate with one another.

Over the years the Kids' Edible Garden project manager and the Health Promoting Schools coordinator have worked together to encourage schools to be both a KEG's school and a Health Promoting School as well. This connection provides the school with the support from the KEG's coordinator; KEG's programme manager and HPS coordinator. All schools have good relationships with all these parties and understand they can request support at any time to help link with an agency, key community person, business etc.

Extra funding became available from Nelson Marlborough District Health Board, during 2008 to 2012, to pilot the next stages of the KEG's programme and respond to suggestions being provided from schools. This allowed greater opportunities to work collectively with other organizations and the wider community while forming relationships that have assisted schools with future funding ideas and local support.

The one gap that was highlighted in this report was the lack of knowledge of what the Marlborough Community Hubs and Marlborough Community Gardens could offer and how families could access programmes like the Backyard Mentoring Programme.

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References

A National Survey of Children and Young People's Physical Activity and Dietary Behaviours in New Zealand: 2009/09 Key Findings, June 2010, The University of Auckland and Synovate.

Appendix 1:

Summary of Comments

What part of the curriculum does the Kid Edible Garden fit into in your school?

Principals	Lead teacher	Facilitator
<ul style="list-style-type: none"> • Health and science mainly. There is a social science aspect also. • All our programme fits under EnviroSchools framework. If we can slot the garden in somewhere we do it. • KEGs is part of the health curriculum at present. The school has invested into the environmental curriculum and in 2013 will be looking at incorporating into the full curriculum. • It's actually across all parts, even art to a lesser extent. • Everything, science, literacy, key competencies, social studies with the community focus and health. • Links with science, skills for life. 	<ul style="list-style-type: none"> • Enquiry unit used lots. Literacy – diary maintained by the students. Maths – measurements, volume etc Oral language – discussions on healthy eating plus loads more. • Mostly science, thinking umbrella, enquiry unit, under the EnviroSchools focus. • “The older children look at the more technical and science side of gardening while I aim to keep the younger children interested by keeping it really fun and eating”. • “we have a rule, you eat something from the garden every time you visit it”. • Under the enquiry umbrella of science, social studies, health; Reading and literature are shared using books, poetry, websites... Thinking hats, diagrams, blends and even art. Water colour paintings for an exhibition, line drawing and practical planting. • We also cover the Maori aspect and links using the garden, the garden's use is endless just needs imagination. • Healthy communities, healthy living, how things grow ... it covers it all. • Everything, maths, literacy, PE, health its in everything. 	<ul style="list-style-type: none"> • Good links with learning, nature and the environment. It is a programme that could capture all learning. • Everything ties in somehow. Its a bonus being the teacher aide and facilitator, can link both roles at times. • Lots, health probably the best and citizenship and participation. • It fits into everything. Reading, writing, maths...it all fits within the garden.

Do you use the KEG programme to deliver any of the key competencies?

Principals	Lead teacher	Facilitator
<ul style="list-style-type: none"> • Yes they are all there. • Manage self especially the behaviour of the children. Its hands on, kinaesthetic activity, making it easier for these children to focus. Plus thinking; using language, symbols and texts; relating to others; participating and contributing. • Yes, we would use them all. • There is different weighting but all of them are there. • Yes we do. Manage self, cooperation, relate to others, participate and contributing. • All key competencies are touched on within the KEGs programme. 	<ul style="list-style-type: none"> • Definitely use the programme. Students make their own lunches from time to time so they are managing themselves; they work as teams so need to work with one another, use symbols..... • Yes, more so with the key competencies over the curriculum. • Definitely all related, down to cooperation skills, text, relating to others and participation. • Yes especially team work and managing self. • Yes. 	<ul style="list-style-type: none"> • All competencies are covered depending on the age group. The older students definitely, the younger ones have more fun so there is less of a focus. • I use it as a lever, it links with the curriculum and captures the key competencies. • Definitely. The programme complements the key competencies, for example Science –bugs and insect; Health – 5+ day etc.

Do you use the KEG programme to integrate in health education?

Principals	Lead teacher	Facilitator
<ul style="list-style-type: none"> • Yes, healthy eating, look after and provide for self. • Yes, it fits straight in. Healthy living, healthy eating, contribution to the community. • Yes, it's a key link. • Where possible we do, sometimes it's alongside what we are teaching and other times it's part of the teaching tool. • 5+ day campaigns, the facilitator helps to strengthen the programme and links with health. 	<ul style="list-style-type: none"> • When the Life Education bus visited us we were able to link so much into that programme too.....friends, digestion, photosynthesis.....it all linked with our garden..... • Not at present. Investigate healthy eating unit possibly at a later stage as our set targets are already in place. • Yes.... . We relate our needs to the garden when using the Life Education Trust. Our basic human needs discussed; shelter, food, oxygen, exercise, love, community connections by sharing the garden...The children made up a poem "Garden, our special place", it's a nice place to go with friends. • Health links we encourage include other plants like Aloe Vera. 	<ul style="list-style-type: none"> • "It's life, life skills" All senses are used - taste, smell, visual and touch. The children are connected to what they are doing rather than abstract learning, they get practical skills. • Definitely. We do hammer in food miles and buy local lots. The year 5/6 seniors learn to read labels, just the simple stuff like fat, sugar and fibre, so they can start managing their own health. • I feel it works best with teachers involved with health. The TAB team (senior students) are not directly involved with the KEGs programme but they still use the garden. For the juniors who are involved with the program, they learn lots about health. • Yes, very much. Promote

Principals	Lead teacher	Facilitator
	<ul style="list-style-type: none"> I try to, yes. It is, but healthy eating still needs to be pushed 	and encourage healthy lunch boxes, healthy meals.

Is the KEG programme in your schools strategic plan?

Principals	Lead teacher	Facilitator
<ul style="list-style-type: none"> Its business as usual, it falls out under Enviroschools. Part of our school vision is "Linkwater life long learners". Within the curriculum goals and under the Enviroschools umbrella. Want KEGs to become business as usual. The focus during 2012 was to develop and build the new garden... Not specifically, it is part of the Eco component of the plan but not specifically with KEGs. It's not mentioned directly but it does fit in. Only with the junior school, not with all years. Part of our school culture is to link as much as we can to Health Promoting Schools. To do this we get lots of support from XXX (HPS advisor) and our parent committee. It is, it's in the annual plan. KEGs is attached within the unit planning, for example nude food. It's in everything, its business as usual so there is no need to pull it out separately. 	<ul style="list-style-type: none"> Not specifically but it is part of business as usual. Enviroschools enquiry unit is our umbrella to the KEGs programme... We looked at cultures and flags and used the garden to celebrate culture and diversity, looking at different foods....the children see it all as one, not separated...it's the whānau ora concept. Not directly mentioned but does get incorporated as part of other areas; improve the physical environment; Improve Safety. 	<ul style="list-style-type: none"> ? Sometimes communication can be an issue due to the large size of our school. Unsure, but would be interested in being involved with planning meetings to plan topics. Currently the lead teacher and I discuss topics at the start of each term and look at ways it can fit within the garden.

What changes would you like to see made to the programme to suit your school needs

Principals	Lead teacher	Facilitator
<ul style="list-style-type: none"> • Facilitators maintained and supported. We are unable to retain our facilitators. We want continuity with a facilitator as the fast turnover we have is disruptive to the programme. • Funding for our lead teacher to be released and work with the facilitator and the children. • No, not really. • Funding. If there is not enough funding it makes it difficult. At present there is not enough time and opportunity to meet all the objectives as the kids only get 2 afternoons each year in the garden. Fund on pro rata basis of number of children on the school role so can build on the student's interest and skills. • More support (funding) for school staff. Its important that we keep a person in the school to keep it at the forefront. • More hours and funding per capita. • More flexibility (with time). Use the hours to suit our programme...reduce time during winter when its quieter and boost the time during the warmer summer months. • Our year 1&2 classes are involved with KEG's, in year 3&4 the leadership develops and by year 5&6 the students are enviro leaders. • Senior children are now working with the junior syndicate, so we have reached the stage where we have implemented a full cycle of the programme....no we are at this stage I wouldn't change anything. 	<ul style="list-style-type: none"> • We have fast turnover of our facilitators, they seem to change yearly...this is difficult for everyone involved. It would help for facilitators to realise how big the job is before they take on the role and have some training with the teaching aspect so the programme links well through an education lens. I'm not sure how we can retain facilitator's long-term..... • Equal funding for time would make it more purposeful and would allow the programme to flow into the classroom better. Funding per student. As a school we evaluated the KEG's programme with students and staff at the end of term, it demonstrated a need and a want for more time in the garden. We get the same amount of funding as smaller schools so the students don't get much time with the facilitator in the garden. • A more purposeful seed bank. • Link with other schools and share seeds/seedlings with others in Marlborough so they are better suited to the Marlborough conditions. • Continue the programme through the entire school, currently there is only enough time (funding) to allow the junior school to take part. • Increase facilitation time so enthusiasm is maintained as the children go through the year levels. Funding per capita would be a great idea. • "plants to become available to the school community to plant at home". 	<ul style="list-style-type: none"> • Use trained gardeners rather than teachers. There is a lot expected of the facilitators, maybe need to get some help or support from parents or not do so much with the programme – maybe look at cutting the programme back. It takes time to get the children involved and 20-30 minutes is not enough time to get through one group and then get a new group of children 20-30 minutes later. • We are not employed for many hours but have lots of preparation and extra jobs in the garden that need to get done like, tie trees down, compost, maintain the garden, weed, water. We have 5 plots at the school plus an open orchard, worm farm, seed raising, cooking etc and it is just too much too do it properly. I get all the jobs completed ok but not great. • More time. I get 2 afternoons each week and need to get through 500 students in the year. Some only get 2 sessions of 30 minutes each so they all miss valuable sections... • The freedom in the structured programme is very helpful, it adds flexibility. • Sharing time on how different schools completed tasks with facilitators. • More classroom commitment by some teachers. This is dependant on gardening enthusiasm by the individual teacher. • More planning with school facilitator.

Principals	Lead teacher	Facilitator
	<ul style="list-style-type: none"> • A bigger garden. • KEGs fits in really well just the way it is, so no changes please. The programme itself takes up as much time as it needs to, its well organised and runs well. 	

Has KEG's assisted with links between other schools? If yes, prompt responses to:

- Relationships formed.
- Sharing of resources.
- Sharing of knowledge.

Principals	Lead teacher	Facilitator
<ul style="list-style-type: none"> • We do support one another within our clusters if any issues occur. When xx school's garden was vandalised we helped out “. • It's given us the opportunity to share knowledge. Our Green Team developed the vision mapping and visited both Grovetown and Springlands schools. • Share resources: It's difficult with the time we have, its just too busy and not enough time. There is a need to keep a coordinator that does this. • 3-4 other schools have been to visit our gardens and we have sent our leaders to other schools also. • We have shared ideas with other schools and this has helped to build some relationships. • Not that I am aware of unless xx or xx have arranged. It's not like we don't want to, time is the issue. “Our older children (who don't take part in KEGs) may do more but our junior school (who take part in KEGs) not so much”. • “This may be an area we could develop, support and encourage initiatives at home maybe” (Unaware of the Backyard Mentoring Programme). • The EnviroSchools focus has allowed more communication and interaction with other schools. • Our school was used for facilitator training. 	<ul style="list-style-type: none"> • Not really, possibly this has more to do with the distance that schools would need to travel to get to us...we are isolated really. • We are keen to share seeds but how? Maybe something that could be looked at. • When asked if they used knowledge net, “no, not as yet maybe we could use this when we become more familiar with the programme. It's like everything else I suppose, just finding the time to play with it and understand what it could do to help us”. • We had 3 other schools in to visit during 2012; the schools shared idea's to extend and develop the gardens, students took ideas away with them. • No not really, we haven't been great at this. We get so bogged down with our own school needs and time is already stretched. • We did visit schools to get ideas on what we could do. • Other schools have visited to assist with their planning. Children from other schools visited and juniors were provided an opportunity to become leaders. 	<ul style="list-style-type: none"> • No, time and opportunity lacks as paid to do 2 hours but spend more than 3 hours onsite plus prep time etc. • The odd resources are shared, depends on the school and how the program is run, facilitator time etc. • The training provided is great, there is plenty of support from the coordinator, she is always available but I feel am not doing the best job I could with the low facilitator hours that I'm paid to do. • We could benefit from relationships with other schools. KnowledgeNet is not being used at present; it's just a time factor. Maybe facilitators could bring surplus seeds with them to meetings and share them then. KnowledgeNet could mention the surplus seeds we have but the same problem still comes up – how do we get them easily? • We share excess cuttings and pass onto the coordinator to distribute and I probably share ideas, recipes and those sorts of things with other facilitators I have met on the trainings. • “make ideas more accessible for teachers like the Heart Foundation Garden resources, the idea of integration of ideas with examples..” • Not really. Knowledge-net not being utilised. Some schools look at each other school gardens to help with their planning and set-up of a new garden plot. • Good communication and sharing of resources and knowledge between facilitators.

Has KEG's assisted with links between the wider community?

- Those whom do not have children attending the school (neighbours)
- Businesses and agencies (Salvation army, Mitre 10 etc)
- Other community programmes (community gardens, mentoring programmes etc)

Principals	Lead teacher	Facilitator
<ul style="list-style-type: none"> • Outward Bound. • Enviroschools resources. <ul style="list-style-type: none"> • Strengthen families and the community. Any excess is shared with the community and families. • Neighborhoods, lesser. • Businesses: "It is so important to make wider links outside of the school, to identify those who can help in the community". • To build our new garden we needed help. The Salvation Army has been absolutely amazing; they gave up their time to build our children their garden that they had worked hard to design..." • Many other businesses and organisations assist our school, it's so important to connect with them, always make them welcomed and say thanks...KEG's hasn't been the driver to develop these relationships but it certainly has given opportunity to get involved...." • Not particularly. We envisage sharing produce with the wider community but as yet this is yet to really happen. • Mitre 10 and Bunnings are keen to be doing stuff with the school. We need to purchase the items we need but get good discounts and they are very supportive. • Unsure. 	<ul style="list-style-type: none"> • Outward Bound built our garden; they have been great to us. • We have fun days at school and we do use the gardens then. The wider community know they can access the garden at any time but the thing is most people out here already have gardens and know what to do anyway. • We did have xx out to visit and he made some great recipes using our produce and made great use of our cooking box. • Our children do love to snack on the produce. • We have a parent who is also an ex orchardist. He has come in to train senior students on pruning etc and they then train younger students in the following year. • Businesses have helped us. Recently we purchased 30 sets of tools; we got a good discount plus support to repaint and help set up storage areas. Other support includes free delivery of equipment, plus donated timber and hardware. • Workbridge has helped our caretaker. Our students are keen to sell excess produce at the local market but this is yet to happen. • We did a community hangi using veges from the school 	<ul style="list-style-type: none"> • The tree planting of the open orchard was a community event with community getting involved. The community and parents are very active but as many travel a long way to the school it's difficult for them to help tend with the garden. • No. • Seed raising workshop with Marlborough Community Gardens; Cooking demonstration with xx; Potager gardens at Pollard Park. • We have had the local church in to look at our raised beds. • We try to link with our community and pull them in. Bunnings recently purchased 30 sets of tools. The shed is being painted but we did have to part with money to purchase the class sets of tools. • xx was great. He used seasonal, out of the garden produce and easy recipes. • Yes, with the wider community and community gardens. We have had support from the wider community and example being organic grower came out to do a pruning demonstration. • DHB and Marlborough community gardens have been helpful. • Marlborough community

Principals	Lead teacher	Facilitator
<ul style="list-style-type: none"> Produce is sometimes sold at the school gate, but nothing direct. The Tomorrow and Beyond (TAB) team may do some more of this for example bring in other experts. Through grants mainly. We got xx in for our irrigation, funding through Canterbury Community Trust. TAB team links with KEGs at the school. As a school we do try to get out into the school community and share produce but there is room to grow here. This could be the stepping stone to expand into the wider community... Publicity in the paper to help increase awareness in the community. We also did a breakfast with NMDHB, I know this was separate to KEG's but it did link. 	<p>garden. Sometimes we sell surplus produce and we do support particular families in hardship.</p> <ul style="list-style-type: none"> The vineyards have been good, they give us "grape marc" (dried grapes to put on the gardens), posts, old irrigation pipe... No not really but Enviroschools has. We do put recipes into newsletters for the wider community. Newsletters to wider community. Knowledge-net website. The children take things home. 	<p>gardens helped when school vegetable garden was vandalised to replace produce and to visit their gardens.</p> <ul style="list-style-type: none"> Kids can Cook mobile kitchen and xx supported the facilitator training but is not well utilised at the schools because of the cost, the kids do not get to do the cooking, its more just a demonstration, and the best way to teach kids is by letting them do it. As facilitators maybe we need to provide feedback and evaluation to xx re the delivery of Kids Can Cook to make it work better for the kids.

Are there any agencies you feel need to be involved with KEG's to enhance the programs outcomes?

Principals	Lead teacher	Facilitator
<ul style="list-style-type: none"> Maybe we could get the preschool next door involved and share our garden with them, possibly have a shared breakfast and invite families so we can develop a relationship with the preschool families earlier. Not really. MDC funding of facilitators is so important but the rest is make the programme suit as you want it to; Marlborough Community Gardens, unsure who else. "I suppose it would be nice to help transfer knowledge and 	<ul style="list-style-type: none"> External support is always welcomed... The programme is working really well and is well resourced. I love the plant to table concept. Health agencies, health protection. They could support with safe handling of compost, potty mix, and safe water. Native edibles linked with edible gardens, not sure who could teach this or who best to link with? Develop community awareness on harvesting private plants, what ones are safe to harvest and eat 	<ul style="list-style-type: none"> The health board was great giving us cooking tools. We (facilitators) are recognised for what we are doing but some more support is needed now that the programme is bigger and keeps growing. It's difficult to fit everything in with other life commitments. "Probably connect with other programmes better, it's a time thing there just isn't enough of it. A visit to the community gardens would be good". "We had Crumbs in to prune trees with us..." Forest and Bird, ECHO tours so probably more to do with the TAB team

Principals	Lead teacher	Facilitator
<p>support into homes and families to set up gardens....I wasn't aware of the Backyard Mentoring Programme until today so that could be one idea....maybe talk with the community gardens..."</p> <ul style="list-style-type: none"> • Not really an agency, but find a volunteer or helper who could work beside the facilitator and assist in the garden. Grandparents in the garden could be an idea...they have more time, often more skill and can help them feel good too BUT we would need someone who is consistent, who will routinely come in so we know when they are around.... • Maybe more involvement from the DHB with healthy eating and cooking. We (everyone) need to impact on the family diet. • No I can't think of anything. 	<p>etc.</p> <ul style="list-style-type: none"> • **(school facilitator) has a dual role with being our facilitator and works with our special and learning needs children. • Keep the health board links to encourage healthy eating. 	<p>and environment.</p> <ul style="list-style-type: none"> • Social workers especially in the low decile schools, so they can see first hand what KEGs can do. • Not an agency but get parents/caregivers involved with the programme so they can help their child to take ideas home; • Other health professionals; • Budgeting support networks, link and share ideas.

Do you have any case studies that demonstrate how KEG's has benefited non-academic learners and children with challenging behaviours?

Principals	Lead teacher	Facilitator
<ul style="list-style-type: none"> • "Behaviour children are more engaged in the garden setting over the classroom. They need more hands on learning, it works. It's child centred and works for them and we as teachers need to find ways to do this....This is a key driver for our outdoor learning classroom..." • There is a regular group of children who get into the garden at lunch times. Our caretaker is a very active participant in the garden and he encourages some of the children to be involved with the maintenance of the gardens. • The programme engages all 	<ul style="list-style-type: none"> • It has engaged with all children to enhance academic learning. • "We have a child working with an RTLB. It has engaged with xx learning. We have seen xx develop confidence, write recipes out off his own drive. His writing has really developed and he is so much more confident. The whole experience for him is great, he does it, makes it, eats it and writes it....a real positive experience". • We have an ORS student who is always in the garden, he loves it! 	<ul style="list-style-type: none"> • We have a senior boy with learning difficulties. He spends time in the garden during his lunch breaks, he thrives in the garden. The garden is a bonus for our students with special needs; it's a safe place/neutral zone. I feel the special needs students need more time in the garden as I have seen it help with their learning and development. • "Some children are very scared to try food from the garden, but the peer pressure is good and eventually most try the food. The garden does help those children with more practical learning skills. It becomes their time to stand out and

Principals	Lead teacher	Facilitator
the children.	<ul style="list-style-type: none"> • **(school facilitator) has a dual role with being our facilitator and works with our special and learning needs children. • All the children are engaged, there are no barriers in the garden, they can all do it. • The programme hooks in all children. Our facilitator makes it interesting and captures all the children. 	<p>shine in front of their peers and teachers. We have students who are very good with photography or even digging a hole, they get to show what they are good with and I see their confidence improve immediately. All the children are involved, not just the more academic learners in the classroom. It evens out all the children, they are all on the same playing field”.</p> <ul style="list-style-type: none"> • We (teachers) often see children that have no food or lunch eating produce from the garden, they eat everything. • The children with challenging behaviours are my best workers in the garden. They respond in a positive manner to all the tasks I give them in the garden. I feel this is the case because they dislike being indoors in a formal classroom setting and are more relaxed outdoors doing jobs that are hands on. Many of these children are ones to target to develop those life skills that are so important for the future.

In your opinion, what strengths does MDC bring to the KEG’s programme:

- (a) Facilitator support and knowledge.
- (b) Individual schools needs.
- (c) Environmental sustainability.

Principals	Lead teacher	Facilitator
<ul style="list-style-type: none"> • Its personal, flexible has good planning and funding, these are so important. • “That there is support for facilitators and links with Enviroschools, its excellent”. • Unsure, but I know there is loads of support from xx and 	<ul style="list-style-type: none"> • MDC has been amazing, they provide everything. Funding, resourcing, manuals, tools, cooking kits... • The support for the coordinator on how it could work really does help. She provides clarification with regular contact and catches up with staff regularly as we 	<ul style="list-style-type: none"> • The whole programme from set up, resources and support but now with the programme growing facilitator time is thin. • Training sessions to get facilitators together and networking with each other each term. The coordinator is a great support, she is

Principals	Lead teacher	Facilitator
<p>MDC.</p> <ul style="list-style-type: none"> Financial, a paid facilitator is always helpful. The programme is great, they listen to us ask for feedback and we can adapt the programme so its flexible. We have the TAB team. "their strengths are huge". "Gardens would not be operating without facilitators. Expectations on healthy eating have to improve. We encourage the children to talk the talk at home and take ideas home with them. We need to impact the family, encourage families to look at having a garden and improve meal choices". "We want to take our orchard to the community. Our vision to be the catalyst to change our communities' behaviour is huge but we can try". Communication and education is top notch. Information is always out quickly and responded to fast. <ul style="list-style-type: none"> So many plus's for our school to take part in KEG's. KEG's ads value to what the school needs to do. 	<p>do have high staff turnover and we need to capture them.</p> <ul style="list-style-type: none"> The funding for teacher release time helps us being a small school so the teachers can meet and share ideas. When asked about environmental sustainability "Fully support but if MDC was not so active the programme would fall over". Communication is great, it's regular and reliable. Knowing what resources are available. Wider approach linked with Enviroschools. It removes the guess work and makes planning for teachers easier. Annie is open to ideas and release time to investigate ideas. They are very supportive, so was xx with PD. Excellent support from MDC. "They are enthusiastic, keep the programme alive with funding, provide expertise when we need it and motivates us for the programme". Excellent 20/10 in all aspects. MDC is wonderful. 	<p>always there to help and assist with learning the ropes.</p> <ul style="list-style-type: none"> MDC assists to create an environment that links environmental sustainability to KEGS. Loads of supports, it's great. We can pass on our ideas and they are listened to. By providing a facilitator and coordinator we are part of the bigger picture. The coordinator helps to keep us (the facilitator) on the ball with reports and assists us (the facilitator) to maintain a quality programme even when the quantity increases. They take our ideas and suggestions and adapt the programme or help us adapt the programme to suit our schools needs and what we want to do with the programme. Without MDC funding KEG's in my opinion would not survive. The support from council enables a consistency in resources, sharing of knowledge and training for facilitators. The teacher training is also made possible with teacher release funding. Xx provides great support to the coordination of the KEG's programme with the key links and umbrella support from Enviroschools.

Would you be able to sustain the KEG's programme without MDC support?

Principals	Lead teacher	Facilitator
<ul style="list-style-type: none"> If MDC pulled out the programme would continue provided facilitators were funded. We (the school) 	<ul style="list-style-type: none"> Sustainability of the programme relies on maintaining a facilitator. The programme wouldn't work if a 	<ul style="list-style-type: none"> No I do not think so. At present as the facilitator I am thin on the ground and only touching the surface. There is not enough time to

Principals	Lead teacher	Facilitator
<p>could not retain facilitators.</p> <ul style="list-style-type: none"> Facilitators are the key, they are needed. There is a definite place in society for KEG's and it needs to grow and provide opportunities for children and the next generation. The programme offers important life skills that we can't afford to lose in society. We as a school want to grow the programme and strengthen KEGS, so we could possibly sustain some components, but funding does help to keep a facilitator. To sustain the programme continue to pay a facilitator, it is so important. The regional coordinator and school facilitator are needed. We can source other resources but we NEED facilitator time and the coordinators support. "We tried one year without MDC support, the garden was hard to maintain and the focus and drive was lost. A facilitator is definitely needed". Yes we would. We (our school) have all brought into KEG's and we have linked it with the health teacher to support the lead teacher. In 2011 KEG's was a separate unit to promote it, now it is part of every day. We have a wall in the school hall to showcase what our school is doing so all parents and children can be reminded what KEG's and EnviroSchools is all about and what is being highlighted in the school. 	<p>facilitator was not provided.</p> <ul style="list-style-type: none"> Not sure, but possibly would maintain some aspects under EnviroSchools. Without MDC support KEGs may not be able to survive. We need the release time and facilitator time... It would be very difficult to maintain KEGs without resources, a facilitator, to make it happen. There is lots of organisation and thought with the programme especially when there are 300 students to get through the programme each term. The children all get 2 sessions in the garden each term. I am so lucky to be part of the programme, it's exactly what our school needs, very beneficial and we want to always run it, so yes I am sure we could keep the programme going. 	<p>look into sections in depth.</p> <ul style="list-style-type: none"> We would be sustainable. Teachers would step up but there is a certain financial obligation for MDC to commit to the programme. KEGs is a big part of EnviroSchools and the vision of xx school. If MDC could only fund a small area then I would recommend it funding a facilitator. For sustainability a paid facilitator is needed.

Anything else you would like to comment on?

Principals	Lead teacher	Facilitator
<ul style="list-style-type: none"> We even have a peanut plant that our facilitator planted. 	<ul style="list-style-type: none"> “maybe some training for knowledge net”. “see learning ownership by children makes it all worthwhile. The children drive it and take ownership”. We are going to try and grow kumara next week. At the moment we have them growing in jars in the classroom. I have learnt lots and if I have any issues at all I know I can contact MDC for support. 	<ul style="list-style-type: none"> As the programme grows there needs to be more time for facilitators so facilitators do not get worn out. How can the programme be made smaller This helps provide for a community that will be healthier in the future by reducing the barriers Teacher input would be helpful. Encourage all teachers to get out into the gardens with the children rather than leaving this to the ones who have an interest already in gardens. Whole school requests are coming in where the whole school takes on the ownership and pride in the gardens rather than parts of the process or just certain classes with some children showing less respect for the gardens.

What are the good things about having a fruit and vegetable garden?

Students	Parents / Caregivers
<ul style="list-style-type: none"> Yum Cheap, free Don't have to pay Healthy I know where it has come from Don't have to buy things to do cooking It's fun to be outside Keeps you strong and healthy It keeps the school looking nice Educational Yummy food Can just pick the food Free Cheap 	<ul style="list-style-type: none"> “He loves raw veges, they never make the kitchen, even broad beans and brussel sprouts”. Fresh and cheap. Can share the extra stuff we have left over. Cheap food, but I'm not a keen gardener, or anyone else in our family. Healthy eating, where food comes from. Family visits to a garden to pick produce on the weekend, cause the garden is open to the community. Use land to make it look better. Gardens look nice and help feed us. Cheap fresh food. “Looks nice if its cared for. Our one at home isn't so we get my father in law in to look after it, I'm just not a gardener and either is my husband. Maybe the kids will be better at it

Students	Parents / Caregivers
<ul style="list-style-type: none"> • Fresh and yummy and juicy • Help community • Eat what you grow • Comes from a plant • Sell the stuff • Eat 5 plus a day • Try new things • Mostly organic • Donate to those in need • Teaches about gardening • Fun • Care baskets • Help those in needs • Lunch time activities • Give back to the school @ lunchtime • Kill weeds • Helping plants • Learning to grow our own produce • So we can cook stuff • Keep healthy • I like eating stuff • Don't need to buy the food from the shop so we save money • Pick food • Eat fruit • Water fights and getting dirty • Healthy • Plant plants • Taste food, yum • Try foods • Plant stuff • Save money. • Get healthy. • Sell produce. • Eat yummy foods, salads and make juices. 	<p>than me”.</p> <ul style="list-style-type: none"> • Fresh and available. • Cheap. • Children and see where food comes from. That it doesn't come from the supermarket. • Something my children can help me with. Family time, a good place to talk. • Fresh food but I hate gardening.

What are some of the things you have learnt as part of the Kids' Edible Garden programme?

Students	Parents / Caregivers
<ul style="list-style-type: none"> • Cooking. • Know how to plant and ready to pick. • How to space plants. • Irrigation ideas. • Seasonal plants. • How deep to plant. • You do not water the leaves when it is sunny. • The size of the pot is important. If it's too small its not good for the plant so need to change the pot when the plant gets bigger. • Learn about different plants. • Lemonade trees taste like lemonade. • To plant seeds. • Design a garden. • Share ideas with my class • What plants look like, what they will grow like what a cucumber plant looks like and a broccoli plant, stuff like that. • Plants have feelings. • Caring for plants. • Food chain. • Water usage/harvesting. • Weed management. • Life cycles. • Oxygen vs CO2. • Photosynthesis. • Pruning. • Experience new fruit and vege. • Planting rotation. • Cleaning a space to plant. • Plant identification. • Peter the rabbit. • Tool management. • Companion planting. • Plant things properly. • When the food is ready to pick and eat and when it's going to seed. • How to plant trees. • It teaches us how to care for the environment. 	<ul style="list-style-type: none"> • Worm farms, we get told everything. • “carve up apple” • Enviro tips. • Eat more veges now. • Cooking taught at school and they want to make the recipes at home. • Everyone needs to “muck in. • Grew interest in home garden. • Normalises gardening. • My son disliked tomatoes but now loves to eat home made tomato soup. • “They are now trying new foods, I think because they are being exposed to more veges and their peers are trying them they feel like they also have to try them. At home this would not happen”. • Healthy eating and living. • Practical skills to grow and prepare foods. • The links with the environment. • Its hands on learning, very practical. • The programme brings all threads together and connects them – life long skills like growing, cooking, compost beside science and the technical information that they would normally learn in a classroom, photosynthesis, solar etc. • The question to “where does food come from?” is answered. • I hear lots about what is ready to eat in the garden and recipes they have made at school. • My children are now in the senior school so I don't hear much about this programme any more, but I do get told lots about recycling and caring for the environment. • Best time to water and how much water to put on them. • My children often talk about how healthy they can be and why they need to eat vegetables and fruit. • My son does not say much about KEGs to me so have not learnt lots.

Students	Parents / Caregivers
<ul style="list-style-type: none"> • Grow strawberries. • How to plant at home. • Health (4 students). • When the food is ready to harvest and ways to use it. • Seasonal plants. • Planting ideas (did trough size). • The plants need sunshine. • How to garden. • When and how often to water. • What to use, tools etc. 	

Have you made any changes at home because of the KEG programme?

Students	Parents / Caregivers
<ul style="list-style-type: none"> • Cooking the recipes at home. Leek sauce was yum... • Share ideas when planting at home (spacing). • We grew pumpkins at home from our seeds. • I liked the strawberry salad and so did my mum and dad and my sister. • Broad bean dip was yummy • I make my own lunch now and I don't have chips anymore or juice. • I like helping mum to cook, its fun. • Reduce, reuse, recycle. • Composting. • Feed the insects. • Worm farm. • Thinking about water usage. • Strawberries. • More gardening. • More radishes. • "I got dad to grow beetroot and nana let me watch her cook it and put it into jars". • Nana grows strawberries now because I love them • I water my garden after school. • I have taken home some seeds. • We made paper boxes at school and planted seeds in the dirt so we could take them home. 	<ul style="list-style-type: none"> • We have planted more gardens. • We already had a vegetable garden at home (5 families). • My boys love gardening, we have a garden at home but we had to build another one just for our boys. • Recipes are brought home to cook at home. • "My children ask for salad sandwiches now rather than jam ones. They are more aware of healthy eating. I can't say this is just from the programme or if it's a combination of me nagging, school encouragement, them getting older and KEGs". • They are more willing to try different foods. • We have made raised beds for our kids. • Composting awareness was raised by my daughter and she made us start our own compost at home. • Scrapes are now being recycled and given to our chooks. We have been made to become more aware at home, it's quite funny being told what we need to be doing by our child; it's certainly a change.... • "You don't need to use spays pop, you can plant special plants to stop bugs" was what my son told his grandfather. • No not really. We did put in a vegetable garden but that all went to seed last year. The kids didn't push for the garden; my father in law did so probably can't say the change was because of this KEGs programme.

Students	Parents / Caregivers
	<ul style="list-style-type: none"> • No not that I can say came from the KEGs programme. • Seeds have come home for us to grow. They plant the seeds at school until they spout and then bring them home. • We already had a vegetable garden and some fruit trees at home.

Have you had any other support from other people or groups as part of the KEG programme?

Students	Parents / Caregivers
<ul style="list-style-type: none"> • Bunnings. • Mitre 10 Mega. • Mr Hynd. • Timber yard. • Senior students. • Mr Welsh. • Lara. • Mr Sterling. • Blacks Fastenings. • Green ferns. • Council. • Students. • Wairau worms. • I planted seeds at home and grew corn. • I made mum put the ash from the fire onto the garden because it's good for it. • Composting – I got nana and poppa into worm farms. • 8 others also started worm farms at home. • Made the recipes at home (10 of the 20 students). 	<ul style="list-style-type: none"> • No I haven't. • There was very little awareness of other support groups in the community. One person had heard of the Marlborough Community Gardens from the 5 parents. • No we haven't, I am not a keen gardener and probably have not encouraged my son to do any either.

What could be done to make the programme better for you?

Students	Parents / Caregivers
<ul style="list-style-type: none"> • A melon patch would be really cool (all the students agree this is a cool idea). • A glasshouse to try growing other plants. • Plant other trees like Pacifica varieties. • Kumara plant. • Maybe plant capers and olive trees. We could 	<ul style="list-style-type: none"> • I don't know, it seems to be an awesome now. • More time in the garden. They don't seem to get much hands on time, they are always buzzing after having a class in the garden, they don't stop talking". • Propagation sheds, expand or connect with

<p>make olive oil...that would be cool.</p> <ul style="list-style-type: none"> • More raised beds. • More cooking time. • Na it's good now. • Platters for the bus kids. • More time in them (the gardens). • Solar panels. • Lunches for those who need. • Expand to other areas of the gardens. • More cooking, its yum and fun. • Let the senior students be involved. • More strawberries. • A bigger garden. • A berry patch, I love berries. 	<p>community somehow.</p> <ul style="list-style-type: none"> • More gardens, maybe a garden per class. • "More time for the children to be in the school garden. We are a large school so the children get very little time in the garden, and none of them will see the whole cycle, the progression of the produce through to harvest". • Connect the seasons? Not sure how much this is done with the students. • Maybe invite parents or grandparents to the gardening classes to help out. • No.
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What does having an edible garden mean to you?

Students	Parents / Caregivers
<ul style="list-style-type: none"> • Cool, get to eat stuff out of it. • Learn how to plant. • Fun, we don't have to buy it we just get it straight from the garden. • It makes it fun to learn. • Educational and fun. • We learn how to make things. • Designing a garden. • Lots of fresh food. • There is always something to eat. • Getting dirty and looking for bugs and worms. • Helping to make the plants get bigger. • Learning lifecycles. • Food chain. • Healthy garden is what you need to do for healthy eating. • What nutrients the plants need to grow. • How to keep a garden healthy and how to stop bugs killing the garden. • Yummy food. • Cooking. • Looking for bugs and worms. • Free food. 	<ul style="list-style-type: none"> • Family time. • Lifetime of providing for one self and the family. • Feed the family. • Pass down knowledge to next generation. • Understand the lifecycle, how gardening joins into a circle. • Ability to pick fresh produce. • Connection of growing what you eat. • Sustainability, being self sufficient. • Saving the seeds so you don't need to spend money buying them. • Work. • Another job that needs to be done. • Fresh food that is not sprayed. • Lots of work.

Students	Parents / Caregivers
<ul style="list-style-type: none"> • Interesting seeing the colours change and the food getting bigger. • Yummy. • Tasty. • Healthy. • Look after edible stuff (2 students). • You loose echo life if you pick leaves and break the branches. • Take more produce home especially if you run out of food at home. • Find out what will make the plants grow bigger. • Make the school garden bigger so we have more plants and more food. • Edible garden canteen could be free or pay. The seniors can run the canteen with some help from grown ups or teachers. • Water fountain or a sprinkler in the middle of the garden. This would be really cool on a hot day. • Bugs. • Healthy food is healthy. • Eating healthy food (7 students). • Fresh free or cheap food (4 students). • I grew it myself; I made it myself. • Plant food you like. • Learn gardening skills. 	

Is there anything else you would like to comment on?

Students	Parents / Caregivers
<ul style="list-style-type: none"> • The students were keen to tell me that they remember what they have done in the garden by keeping a diary. • Get a frozen yoghurt machine. 	<ul style="list-style-type: none"> • "I have 4 children, my eldest 2 were not involved with KEGs, the school didn't have the programme yet, and they are definitely not gardeners. My younger 2 have gone through the KEG's programme and they love gardening. There is such a big difference between the 2 that are doing KEGs and the 2 that haven't. They love to plant and play in the garden; not that they like to eat the veges, they give away what they have grown and love to share and teach their skills to others". • It's a cool school programme, relating to the children's age and level. • The kids get so excited and look forward to working in the garden when it is their turn. • It is a great extra curricular activity...we are happy for our children to be removed from

Students	Parents / Caregivers
	<p>their normal classroom activities to spend time learning outdoors, this is what life is all about.</p> <ul style="list-style-type: none"> • “My son only gives me a small snippet of his day at school, but when he has been in the garden I get loads more feedback on the happenings at school for that day”. • “KEGs always gets my kids talking more about what they have been doing at school”. • “The teachers don’t have time to do everything- having a passionate facilitator with great relationships with the children is hugely beneficial”. • ? Ability to expand into cooking and wider areas...how deep can it (KEGs) be completed well or are areas just touched on?