

The Enviroschools Programme: Summary of evaluation and return on investment scenario analysis

Summary report

28 October 2015

Prepared for: Toimata Foundation



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Prepared by: Alicia Crocket, Julian King, Kate McKegg, Judy

Oakden

Contract held The Knowledge Institute Limited

by:

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1 Introduction

- 1. The Enviroschools Programme is an "action-based education programme where young people plan, design and implement sustainability projects and become catalysts for change". It is an Education for Sustainability programme operating at the early childhood, primary, and secondary level and beyond.
- 2. Toimata Foundation (formerly The Enviroschools Foundation), uses a strongly collaborative approach, building strong relationships and sharing information across multiple networks and multiple stakeholders. Across Aotearoa New Zealand they support nearly 100 national and regional partners to further the journey of sustainability in nearly 1,000 schools/Early Childhood Education (ECE) centres. This approach creates a "collective puna mātauranga or pool of knowledge" ² that enables and inspires young people to contribute to a more sustainable society.
- 3. This report integrates the findings of an evaluation of the Enviroschools Programme with the findings of a Return on Investment (ROI) scenario analysis which was a component of the evaluation not previously included in the final evaluation report.
- 4. The purpose of the evaluation was to identify how well the Enviroschools Programme enables effective Education for Sustainability in Aotearoa New Zealand. The evaluation process included the undertaking of several pieces of research as well as a review of existing evidence.
- 5. The criteria used in the evaluation, informed by relevant literature, represent the dimensions of effectiveness for highly effective Education for Sustainability programmes operating in complex and everchanging contexts. The criteria focus particularly on characteristics for programmes that aim to influence long-term environmental and behaviour change, which is what the Enviroschools Programme aspires to. The evaluative criteria are shown as dimensions of effectiveness in Figure 1 below.

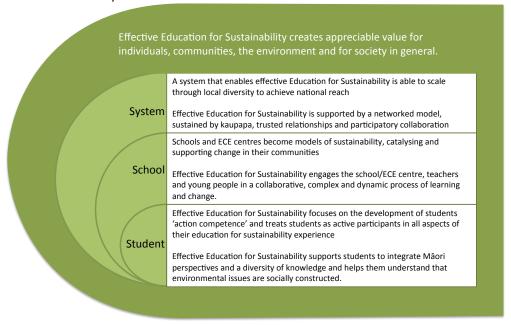
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¹ These descriptions are taken from the Toimata Foundation website: www.toimata.org.nz. Accessed 26th June 2015.

² Sourced from the Enviroschools Programme website: <u>www.enviroschools.org.nz</u>. Accessed 26th June 2015.



Figure 1: The high-level dimensions that contribute to effective Education for Sustainability



- 6. The ROI scenario analysis was conducted as part of the evaluation to compare the value created by the programme with the resources (time and money) invested in it. The scenario analysis used cost and outcome data from Toimata Foundation, national and regional partners and schools, including data from the 2014/15 school survey of the Enviroschools Programme. The scenario analysis focused on environmentally sustainable behaviours within participating schools/centres that were able to be valued in monetary terms, using available data.
- 7. This summary report presents the findings of the evaluation for the performance at the student, school, systemic and societal level. For the student, school and systemic level the findings are primarily sourced from the evaluation. At the societal level, the findings are sourced from both the evaluation and the ROI scenario analysis.

Findings in a nutshell

- 8. The Enviroschools Programme is a very high-performing programme and achieves this performance through high levels of systemic support from Toimata Foundation.
- 9. Toimata Foundation provides strong, committed and effective support for the Enviroschools Programme, without which it is unlikely the Programme would be able to create the extent of scaled impact it achieves. Toimata Foundation's relational and networked model of delivery enables local innovation and action, embedding a relatively high level of resilience for the Programme and its vision at local levels.



The effectiveness of the Enviroschools Programme

- This section of the summary report starts by discussing the evaluation 10. findings at the student, school/ECE centre and systemic level. It then presents findings from the evaluation and the ROI scenario analysis to demonstrate the value of the Programme at a societal level.
- Table 1 below summarises the findings of the evaluation at the student, 11. school/ECE centre and systemic level.

Table 1: Dashboard of performance at high-level dimensions for effective **Education for Sustainability**

Education for Sustainability					
High-level dimensions	Poor	Emerging	Good	Very good	Excellent
Student level: Effective Education for Sustainability supports students to integrate Māori perspectives and a diversity of knowledge and helps them understand that environmental issues are socially constructed.					
Student level: Effective Education for Sustainability focuses on the development of students "action competence" and treats students as active participants in all aspects of their Education for Sustainability experience.					
School/ECE ³ centre level: Effective Education for Sustainability engages the school/ECE centre, teachers and young people in a collaborative, complex and dynamic process of learning and change.					
School/ECE centre level: Schools and ECE centres become models of sustainability, catalysing and supporting change in their communities.					
Systemic level: Effective Education for Sustainability is supported by a networked model, sustained by kaupapa, trusted relationships and participatory collaboration.					
Systemic level: A system that enables effective Education for Sustainability is able to scale through local diversity to achieve national reach.					

Student level

- The Enviroschools Programme works effectively for students, providing 12. significant scope for engagement in multiple settings and action areas. Furthermore, the Programme is student-centred, encouraging and supporting students to develop critical thinking and problem solving skills and to then take action.
- The rich diversity of opportunities and settings that students experience 13. and connect with as part of their involvement in the Enviroschools Programme creates the backdrop for students to be able to deeply engage with concepts of sustainability. Across the country, students are

³ In the body of this report 'school/ECE centre' is shortened to 'school/centre' for readability purposes.



participating in more than 10,000 sustainability focused actions in multiple action areas, inside and outside of schools/ECE centres. On average, in 2014 each school/centre centre that responded to the census survey (n=688) participated in 6.7 action areas incorporating 14.7 different types of actions.

14. Students are also connecting and collaborating with local communities. The integration of Māori perspectives into the programme is evident through the range of cultural outcomes that the Enviroschools Programme is contributing to.

"[Our most significant change was] A greater awareness of Tikanga Maori as we celebrate and respect the atua and Kaitiaki."

School level

- 15. At the school level, the Enviroschools Programme clearly engages the whole school/centre in the learning and change process that is the Enviroschools journey. Although there is some variation between schools/centres, most are making system-wide changes and participating in collaborative decision-making to contribute to, and be enthusiastic about, the Enviroschools vision for a sustainable world. We estimated from results in the census survey that 100,000 students nationwide actively participate in the Enviroschools Programme. Remarkably, one quarter of these participating students are active decision-makers.
- 16. The school survey highlights the broad range of outcomes that schools/centres consider the Programme is contributing to. The outcome areas include citizenship and ecological, cultural, educational and social. The level of contribution of the Enviroschools Programme to the broad outcomes indicated by schools/centres suggests that the Programme encourages schools to consider and implement change that aligns with the broad concept of sustainability. For example, high proportions of schools reported that the Enviroschools Programme is contributing to the following outcomes to a moderate-high degree: citizenship and ecology (78%), educational (71%), social (71%) and cultural (65%).

Systemic level

- 17. At the systemic level, Toimata Foundation achieves all the systemic capabilities that are required to support an effective Education for Sustainability programme. The networked model it operates is ideally suited to support all stakeholders to have long-term engagement with the Enviroschools Programme, encouraging local diversity to achieve national reach.
- 18. The networked model of the Enviroschools Programme is diverse and wide-ranging; engaging multiple stakeholders who represent cross sector interests. There are nearly 100 national and regional partners in the



network supporting the implementation of the Enviroschools Programme. Toimata Foundation, as the holder of the kaupapa of the Enviroschools Programme, has a key role in sustaining the network. The strength of the networked model results from the use of a dynamic, emergent and adaptive approach that supports resilience and self-renewal of the programme.

- 19. The evaluation concluded that Toimata Foundation is perceived by key stakeholders to be an inspiring and empowering organisation, cultivating respectful relationships that encourage and support diverse stakeholders to engage in participatory and collaborative action.
 - "I have really benefited from, and value the relationship which has developed between myself, the teachers I work with and the managers and staff from the Enviroschools Foundation." [note: this survey response was from 2014 before the name change to Toimata Foundation].
- 20. Toimata Foundation, through its role as a backbone organisation⁴, provides the glue that holds the regions together. Toimata Foundation enables the ongoing professional development, resource creation and peer mentoring amongst the regions that is needed to keep the programme growing and developing. The regional network and subsequently the schools/centres would struggle to engage effectively in the Enviroschools sustainability journey and have the impact they are achieving without the support of Toimata Foundation.

Societal level

- 21. The high performance of the Enviroschools Programme creates value for students and schools/centres and the environment. In addition, the evaluation and the ROI scenario analysis identified that the Programme also creates value for communities and society in general.
- 22. What is valued and considered valuable is a matter of context and perspective. The evaluation considered both the intrinsic and extrinsic dimensions of value of the Enviroschools Programme⁵.
- 23. The evaluation concluded that the Enviroschools Programme generates value for society, including contributing to the Ministry for the Environment's mission of "Environmental stewardship for a prosperous New Zealand". There are multiple connections between the Enviroschools Programme and the Ministry for the Environment (MfE) Statement of Intent 2013–2016⁶, These can be seen at the output, impact, long-term outcomes and overall mission levels.

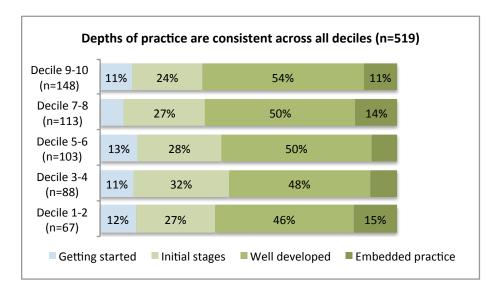
⁴ Kania, J. & Kramer, M. (2011). Collective Impact, *Stanford Social Innovation Review*, Winter.

Scriven, M. (2007). The logic of evaluation. In H.V. Hansen, et. al. (Eds), Dissensus and the Search for Common Ground, CD-ROM (pp. 1-16). Windsor, ON: OSSA.
Ministry for the Environment. (2013). Statement of Intent 2013 - 2016. Accessed from www.mfe.govt.nz on June 30 2015.



- 24. Further to these specific government objectives, value is generated through the broad outcomes achieved by the Programme which contribute to a more equitable society. The broad outcome areas such as citizenship and ecology, social and cultural that are supported by the Programme impact not only staff and students, but ripple outwards into the wider community.
- 25. Furthermore, we know from the census survey that in schools/centres with deep and embedded practice the Enviroschools Programme contributes more deeply to these broad outcomes. One of the key findings from the census survey is that the levels of practice achieved by participating schools are consistent across all deciles.
- 26. Figure 2 below demonstrates this finding across deciles.
- 27. The Enviroschools Programme can therefore be considered to be contributing to outcomes that promote a more equitable society at all levels of socio-economic status.

Figure 2: Depth of practice in the Enviroschools Programme at different deciles



- 28. The Enviroschools Programme's role in encouraging a more equitable society is also demonstrated through the programme focus on biculturalism and engagement with Māori. At the systemic level, the bicultural approach of Enviroschools Programme and Toimata Foundation supports and promotes the value of Māori philosophy and knowledge. In addition, Toimata Foundation also support a Māori-medium, sustainability-focused programme Te Aho Tū Roa that furthers Māori participation and reconnection to their whenua.
- 29. The ROI scenario analysis demonstrates the efficiency of the programme, projecting a positive ROI over a ten-year period for all investors in the programme. This scenario analysis is based on the investment in the Programme in 2014 and the projected benefits over the next ten years.



Table 2 provides examples of the broad outcomes identified in the evaluation. The final column in the table indicates which outcomes are monetised in the ROI scenario analysis.

Table 2: Outcomes experienced by schools/ECE centres participating in

the Enviroschools Programme

Outcome area	Examples	Monetised in ROI analysis
Societal	Contributing to the creation of a caring, peaceful and more ethical society	No
	Resilient communities, for example, increased support through creation of a network of support and shared learning	No
	Greater appreciation for and connection to natural landscapes	No
School and	Celebration and sharing of cultural identity	No
community	Increased appreciation for biculturalism – integration of Māori culture, knowledge and wisdoms into school practices	No
	Celebration of local history	No
	Green practices at school events	No
Student	Empowering and motivating students to learn, make	No
	decisions and think about their community and future	No
	Developing skills for livelihoods in rural communities	No
	Student-led advocacy	No
	Conscious consumption and ethical purchasing	No
	Charitable actions	No
Environmental	Waste minimisation	Yes
	Biodiversity restoration	Yes
	Food production and use	Yes
	Water conservation and care	Yes
	Sustainable energy use	Yes
	Ecological building practices	No

- Investment in the Enviroschools Programme in 2014 was \$10.9 million from national and regional partners, schools and their local communities. This includes monetary contributions as well as volunteer time (for example, schools and communities volunteered an estimated 20,000 hours to plant trees in 2014). This investment equates to \$43 per student enrolled in participating schools/ECE centres.
- This investment was projected to realise a return of \$28 million over ten years (at a 5% discount rate). This creates a benefit cost ratio of approximately \$2.50 over ten years for every dollar (or in-kind support) invested in the programme, or an ROI of 11% per annum.
- 33. Estimating the future value created by the Enviroschools Programme over a ten-year period involves dealing with uncertainty. As with any modelling exercise, this study involved the estimation of various parameters based on available data and conservative assumptions. To explore the impact of key sources of uncertainty on the findings, sensitivity analysis was conducted. We concluded from this analysis that the results of the model were stable, with a positive benefit:cost ratio in the range of \$2.00-\$3.00 per dollar invested being obtained within a plausible range of input values.
- The scenario analysis also affirmed the findings of the evaluation; that the successes of the Enviroschools Programme are realised through a



'collective impact' model. By this we mean investment is leveraged to create a larger pool of resources and through engaging additional stakeholders the outcomes achieved are enhanced.

The ROI analysis highlighted the way national and regional resources effectively leverage support from school and their communities. For every \$1 that Ministry for the Environment invests, other investors (nationally and regionally) contribute \$8.90 of funding and in-kind support. For every \$1 invested by regional partners, other investors contribute \$2.60 in funding and in-kind support.



3 Conclusion

- This summary report indicates that the Enviroschools Programme is a high-performing programme. The Enviroschools Programme has substantial reach and coverage in New Zealand schools and ECE centres. The programme is student-centred and focuses on developing students' passion and commitment to sustainability. Further, through the Enviroschools Progamme, school/centres and communities are also motivated to make and maintain sustainable action and change.
- The kaupapa of the Enviroschools Programme is held by Toimata Foundation, which the evaluation has concluded is highly effective at supporting the implementation of the Enviroschools Programme. Toimata Foundation facilitates and maintains a networked model of delivery for the Enviroschools Programme that nimbly and deftly interweaves all the systemic capabilities necessary to create collective impact at scale.
- The evaluation and ROI scenario analysis demonstrate the value of the Enviroschools Programme, not only for student and schools/centres but also for government. The Enviroschools Programme is effectively achieving its own vision and objectives, as well as contributing to the mission and objectives of it's major government funder.
- 39. And even with a conservative ROI scenario analysis, a positive return on investment is projected. This reinforces the conclusion that the Enviroschools Programme is a worthwhile investment, positively impacting students and schools, and providing value at a societal level. The programme is creating an effective intergenerational legacy, empowering young New Zealanders and their communities to create and realise the aspirational vision of a more sustainable world.