PLACE-BASED EDUCATION FOR SUSTAINABILITY IN GIPPSLAND SCHOOLS
PLACE-BASED EDUCATION FOR SUSTAINABILITY IN GIPPSLAND SCHOOLS

A report for participating schools and the wider school communities in Australia about the implementation of place-based sustainability curriculum

March 2013

Monica Green
(Faculty of Education, Monash University, Gippsland)

Margaret Somerville
(Centre for Educational Research, University of Western Sydney)

Miriam Potts
(Faculty of Education, Monash University, Gippsland)
Authors
Monica Green, Faculty of Education, Monash University
Margaret Somerville, Centre for Educational Research, University of Western Sydney
Miriam Potts, Faculty of Education, Monash University

Copy-edited by
Rhubarb Academic Editing

Printed at
University of Western Sydney, Kingswood, NSW, Australia [Print Services]

ISBN: 978-1-74108-274-6  (p-rpt)
ISBN: 978-1-74108-275-3  (e-rpt)

This document is also available on the Internet
(http://www.uws.edu.au/centre_for_educational_research/cer)

COMMONWEALTH OF AUSTRALIA
Copyright Regulations 1969

WARNING

This work is copyright.

This work may be reproduced for private study, research or educational purposes and as permitted under the Copyright Act 1968 of the Commonwealth of Australia. Commercial copying, sale, hiring or lending is prohibited. Apart from the permitted uses as stated above no part of this work may be reproduced by any process without the written permission of University of Western Sydney. This work has been funded by the Faculty of Education, Monash University, Victoria, Australia. Any permitted reproduction must include a
TABLE OF CONTENTS

LIST OF FIGURES .................................................................................................................. ii
EXECUTIVE SUMMARY ......................................................................................................... iii
RECOMMENDATIONS ............................................................................................................ iv
AUTHORSHIP AND ACKNOWLEDGEMENTS ................................................................. v

PLACE-BASED EDUCATION FOR SUSTAINABILITY IN GIPPSLAND SCHOOLS .......... 1
INTRODUCTION ...................................................................................................................... 1
EDUCATION FOR SUSTAINABILITY .................................................................................. 2
Sustainability in schools ......................................................................................................... 2
Previous research on sustainability in Gippsland schools .................................................... 2

AIMS OF THE STUDY ........................................................................................................... 3

LOCATION OF THE STUDY .................................................................................................. 3
Gippsland as a region .............................................................................................................. 3
Participating schools ............................................................................................................ 4
Latrobe City LGA .................................................................................................................. 5
Commercial Rd PS .............................................................................................................. 5
Kosciuszko St PS ................................................................................................................ 6
St Gabriel’s PS ...................................................................................................................... 6
Bass Coast LGA ................................................................................................................... 7
Powlett River PS .................................................................................................................. 7
Wellington LGA .................................................................................................................. 8
Cowwarr PS ........................................................................................................................ 8
Heyfield PS ........................................................................................................................ 8
Stratford PS ......................................................................................................................... 9
South Gippsland LGA ........................................................................................................ 9
Foster PS ............................................................................................................................. 9

METHODOLOGY AND METHODS ..................................................................................... 10
Data collection ...................................................................................................................... 10
Research Journal ................................................................................................................ 11
Semi-structured interviews via focus groups for each school ............................................. 11
Photographs ......................................................................................................................... 11

ANALYSIS OF CASE STUDY DATA ................................................................................ 12
Local/place-based focus .................................................................................................... 12
Partnerships: community as curriculum ........................................................................... 13
Pedagogies for integrated sustainability learning ............................................................. 15
Garden-based learning: producing knowledge and values ................................................ 17
Philosophical commitment ............................................................................................... 18
Funding and resources ...................................................................................................... 19
Place-based sustainability education for pre-service teachers ......................................... 20

CONCLUSION ..................................................................................................................... 21

REFERENCES ..................................................................................................................... 22

APPENDICES ..................................................................................................................... 24
Appendix A: Explanatory Statement: Teachers, school principals and community experts .... 24
Appendix B: Consent Form - Teachers and school principals ............................................. 26
Appendix C: Letter to schools ........................................................................................... 27
Appendix D: Placement participation for schools ............................................................... 28
### LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Map of Victoria and the six local government shires of Gippsland</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>Map of participating Gippsland schools (Source: Route planner)</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>Brodribb Rd wetlands</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>Commercial Rd PS playground</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>Infant vegetable garden</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>Children’s designs of grounds</td>
<td>6</td>
</tr>
<tr>
<td>7 and 8</td>
<td>School ground playing areas</td>
<td>7</td>
</tr>
<tr>
<td>9</td>
<td>Tree planting near school</td>
<td>7</td>
</tr>
<tr>
<td>10</td>
<td>Newly made front garden</td>
<td>7</td>
</tr>
<tr>
<td>11</td>
<td>Mural in school ground</td>
<td>8</td>
</tr>
<tr>
<td>12</td>
<td>Front entrance to school</td>
<td>8</td>
</tr>
<tr>
<td>13</td>
<td>Community wetland</td>
<td>8</td>
</tr>
<tr>
<td>14</td>
<td>School vegetable garden</td>
<td>8</td>
</tr>
<tr>
<td>15</td>
<td>School vegetable garden</td>
<td>9</td>
</tr>
<tr>
<td>16</td>
<td>Woodlands interpretive trail</td>
<td>9</td>
</tr>
<tr>
<td>17</td>
<td>School vegetable garden</td>
<td>9</td>
</tr>
<tr>
<td>18</td>
<td>Fire pit near garden</td>
<td>9</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

This report is part of a larger project, ‘Place-based Education for Sustainability: Linking teachers and teacher education students in place-based learning’, a longitudinal study designed to investigate how to embed the approaches of schools that practise integrated place-based learning into the curriculum and pedagogies of teacher education. An essential aspect of the second year of this study was to understand the nature and type of sustainability education practices in a range of schools across the Gippsland region in order to provide a broader location for practicum placement than the single school we partnered with in Year 1 (Somerville & Green, 2012). Ten schools had self-identified in another study for further in-depth research (Somerville & Green, 2013), and eight of these schools volunteered to participate in a study of their sustainability education and to accept groups of pre-service teachers for their practicum placement.

The study of sustainability education practices in these eight schools used a place-based, case study methodology in which data was collected about the local government area in which the schools are located, the immediate location and nature of the school, and the perspective of principals and teachers concerning their sustainability programs. Methods included digital visual recording of school grounds and sustainability projects, digital audio recording of semi-structured interviews with teachers, field notes of meetings with principals and teachers, and observations of sustainability programs. Data was analysed using continuous coding to determine key themes in relation to the nature of integrated place-based sustainability education in Gippsland schools.

The key themes that emerged from this analysis were:

- Local place-based focus
- Partnerships: community as curriculum
- Pedagogies for integrated sustainability learning
- Garden-based learning: producing knowledge and values
- Philosophical commitment
- Resources and funding
- Sustainability and place-based opportunities for pre-service teachers

The study found that the sustainability initiatives described by participants are determined by the socio-ecological characteristics of the places and communities in which they are located. While the focus on sustainability education is unique to each school, local places such as wetlands, creeks and rivers, school grounds and food gardens featured significantly as important field sites for teaching and learning sustainability. As the school program moves out into the community, the community itself provides the curriculum for place-based sustainability learning and schools draw on experts from the community in their place-based learning. Community partnerships are essential for the maintenance of enduring sustainability education programs in these schools.
All sustainability programs involved embodied learning experiences that are best described as action-based and hands-on. In the best examples, children’s ‘in field’ experiences are linked to classroom learning. The use of integrative and inquiry-based learning in sustainability education places students at the centre of learning, where they work independently in small groups in local places. School food gardens, in particular, teach students about local eco-social systems and were found to enable those children who did not thrive in the traditional classroom to flourish. Most of the schools have developed whole school approaches to sustainability learning, which includes philosophical intent and commitment to conduct sustainability across the wider school community.

Participants in this study said the demise/reduction of sustainability programs was due to a lack of funding or the departure of a key teacher. The majority of the schools rely on creative entrepreneurial schemes to generate additional finances and depend on human resources such as parents, community volunteers and other local expertise to support sustainability curriculum. The placement of pre-service teachers in schools with integrated sustainability education is a step in the direction of ensuring the longevity of these programs through the expertise of new teachers entering the education system.

RECOMMENDATIONS

1. To disseminate the findings to participating schools and the wider school community
2. To advocate for the provision of adequate resources to support the implementation of sustainability education in schools
3. To incorporate the findings into teacher education in order to extend the nature and scope of education for sustainability
4. To provide input into the professional development of teachers
5. To expand available resources that will support the implementation of sustainability education in primary school curriculum
AUTHORSHIP AND ACKNOWLEDGEMENTS

Margaret Somerville provided mentoring and leadership in this project. Monica Green carried out the research for the study and was assisted by Miriam Potts (Research Assistant) with project management and photography.

We wish to thank the principals and teachers who provided their valuable time in order for us to collect the research data that informed the basis of this report. We acknowledge the classroom teachers who spent three weeks of their teaching time mentoring Monash pre-service teachers. We would also like to thank the school students who so willingly showed us around their school grounds. We wish to acknowledge the Faculty of Education (Monash University) for financial support.
PLACE-BASED EDUCATION FOR SUSTAINABILITY IN GIPPSLAND SCHOOLS

INTRODUCTION

This report presents the outcomes of a study of the implementation of place-based sustainability education in rural and regional schools in Gippsland, Victoria, Australia. It is part of a larger longitudinal study designed to link teachers and teacher educators in the development of curriculum and pedagogies for the integration of sustainability education into pre-service teacher education and professional learning for teachers. In the first year of the study two teacher educators partnered with a lead teacher, the deputy principal and two Grade 3/4 teachers from Commercial Rd Primary School, Morwell in participatory action research to trial a process for the integration of sustainability into teacher education and professional learning (Somerville & Green, 2012).

The particular unit involved in the trial, a core unit in the Bachelor of Primary Education called ‘Understanding Space and Place’, was a unit that involved a practicum placement. One of the findings was that student teachers who were placed in the majority of primary schools across Victoria confronted resistance to their new learning and to the idea of sustainability education. We sought sustainability-rich schools for the second year of the project from schools that had been involved another research project, ‘Mapping sustainability initiatives in the Gippsland region’.

A number of schools responded to the mapping survey with details of their sustainability programs and nominated for further in-depth research (Somerville & Green, 2013). These schools are the basis of the research on which this report is based. They also offered to take individual or small groups of practicum students so that they could experience practicum in a school environment that had a positive approach to the implementation of sustainability education. Their experience of supporting these pre-service teachers in their sustainability education practicum is also a component of this report.
EDUCATION FOR SUSTAINABILITY

Education for sustainability is an emergent and dynamic concept that encompasses a new vision of education (UNESCO, 2002, 2012). Sustainability has been identified as the reorientation of society to equip citizens with critical thinking and problem solving, participatory decision-making, and systemic thinking skills to address today’s complex sustainability issues (Onwueme & Borsari, 2007; Sterling, 2012; Tilbury & Wortman, 2008). Integral to achieving these goals are teaching and learning practices that emphasise environmental and social justice (Furman & Gruenewald, 2004). Key researchers in the field propose that sustainability education requires a new paradigm ‘that makes learning towards sustainable living an explicit, central and integrating concept in education planning and practice’ (Sterling, 2001, p. 83).

Sustainability is the tool that global, national, and local organisations and groups are using to initiate authentic action to address eco-social planetary problems. It is important, therefore, to take the term seriously and re-animate its meanings through educational research. The policy context of the current research project ‘Linking teachers and teacher educators in developing place-based sustainability education’ is the implementation of sustainability as a cross curriculum priority area in the Australian Curriculum (ACARA, 2012a).

Sustainability in schools

A number of Australian schools are developing integrated curriculum approaches to study sustainability from a variety of perspectives, and from integrated academic disciplines (Feng, 2012). At the heart of this work are school ground geographies and local everyday places (indoor and outdoor) that include food gardens, school kitchens, wetlands, and other naturalised spaces. These learning spaces function as key enablers for children’s deep engagement and long-term commitment to sustainable living practices (Edwards, 2006; Moore, 1995; Stone, 2004). Framed by rigorous approaches that view sustainability education ‘not just as another issue to be added to an already overcrowded curriculum, but as a gateway to a different view of curriculum, of pedagogy, of organizational change, of policy, and particularly, of ethos’ (Sterling, 2005, p. 233), these alternative settings and their associated pedagogies are breaking new ground for the implementation of sustainability (Green, 2011, 2012).

Previous research on sustainability in Gippsland schools

Previous research has investigated the range of environmental programs and initiatives available in Victorian Government schools (DEECD, 2010). The school survey was designed to measure sustainability practices, policies, procedures and funding initiatives. The data collected from schools across the state of Victoria was intended to inform the DEECD’s strategic framework for sustainability initiatives in government schools. Survey questions were framed around sustainability practices such as recycling, composting,
renewable energy use and reduction in energy use. School participation in a number of initiatives such as ResourceSmart Australian Sustainable Schools Initiative Victoria (AuSSiVic ResourceSmart), Solar Schools and Water Efficiency initiatives were also included. In this survey schools in the Gippsland region were found to have one of the lowest participation rates in Victoria in sustainability education.

In this light, the place-based education study provides a timely opportunity to collect new data that informs and expands current understanding of how Gippsland primary schools and teachers are thinking about and practising education for sustainability. The study also presents an opportunity to envision how we might prepare future teachers with the necessary skills and knowledge to teach sustainability, which is recognised as one of three cross curriculum priorities in the Australian Curriculum (ACARA, 2012a).

AIMS OF THE STUDY

1. To investigate the development and implementation of sustainability programs in Gippsland primary schools
2. To analyse teacher reflections about sustainability and place-based learning
3. To identity curriculum and pedagogies in place-based sustainability learning for teacher education and the professional development of teachers
4. To develop a case study for participating schools, teacher education programs and more general dissemination

LOCATION OF THE STUDY

Gippsland as a region

Gippsland is a distinctive region in south eastern Victoria with a particular identity, and identifiable sustainability and climate change challenges. The Gippsland region is 41,538 square kilometres (slightly smaller than Denmark), which represents 18 per cent of the Victorian land mass. The region comprises the six local government shires of Bass Coast, Baw Baw, East Gippsland, Wellington, South Gippsland and the Latrobe City, which are represented in Figure 1 (below). The Gippsland Region extends from Bunyip River in West Gippsland (approximately 85km from Melbourne) to the NSW State Border, from Omeo in the mountainous North to Wilsons Promontory in the South (where Bass Strait forms the border between Victoria and Tasmania). Four of the six shires in the Gippsland region are represented in our study - Latrobe City, Wellington Shire, South Gippsland and Bass Coast (East Gippsland and Baw Baw shires were not represented).
Participating schools

As part of the recruitment process we identified and contacted primary schools identified from the Mapping study that were actively implementing sustainability and place-based initiatives. Overall eight schools expressed an interest in the study, and a total of six schools participated in the project. The participating primary schools were spread across four of the local government shires and included:

- Bass Coast (Powlett River Primary School)
- Wellington (Cowwarr, Heyfield and Stratford Primary Schools)
- South Gippsland (Foster Primary School)
- Latrobe City (Commercial Rd, Kosciuszko St and St Gabriel’s (Traralgon) Primary Schools)
**Figure 2: Map of Participating Gippsland Schools (Source: Route Planner)**

**Key for Figure 2:**
A = Commercial Rd PS (Morwell)
B = Kosciuszko St PS and St Gabriel’s (Traralgon)
C = Cowwarr PS
D = Heyfield PS
E = Stratford PS
F = Foster PS
G = Powlett River PS

The following overview provides a brief introduction to the shires/schools involved in the study and includes a snapshot of current sustainability projects and initiatives associated with each school.

**Latrobe City LGA**

Commercial Rd PS (Morwell), Kosciuszko St and St Gabriel’s (Traralgon) primary schools are all situated in Latrobe Valley (central Gippsland). This specific region is best known for its century-old coal industry, which produces 85 per cent of the state’s electricity through brown coal-fired power generators.

**Commercial Rd PS**

At the time of the study Commercial Rd PS had a school population of 258 students and a teaching staff of 22. One of the school’s main sustainability/place-based projects involves Grades 3 and 4 students who work with Gunai/Kurnai Indigenous elder Doris Patton, Hazelwood International Power Environmental Manager, Kevin Jones, and Monash University teacher education students at the Brodribb Rd wetlands as part of inquiry-based teaching and learning (see figure below).
Kosciuszko St PS

Kosciuszko St PS is a Prep–Grade 6 school and has 257 students and 18 teachers. Although the school is committed to sustainability, initiatives predominantly occur within the lower/infant classes through food garden/recycling curriculum that is driven by one main teacher, with the assistance of parents.

St Gabriel’s PS

St Gabriel’s Catholic school has a population of 472 students and 28 teachers. This growing school community has a number of sustainability initiatives including: a whole school approach to sustainability; an Esso grant of $1,000; orchard with fruit trees; water tanks, solar panels; and a sustainability club. The school has also dedicated a teacher to the role of sustainability officer, responsible for working with classroom teachers to develop sustainability curriculum.
Bass Coast LGA

Bass Coast Shire is the fastest growing shire in Victoria (Bass Coast Shire Council), which is partly due to the construction of the desalination plant at the edge of Wonthaggi and the influx of coastal ‘tree-changers’.

Powlett River PS

The township of Powlett River and surrounds has a population of approximately 6,000 and is situated close to the township of Wonthaggi. Currently there are 53 students enrolled at the Powlett River PS, which has six teachers. The school has a focus on the school garden, recycling, tree planting projects with Landcare and partnership links to local government.
Wellington LGA

Cowwarr PS

The small township of Cowwarr has a population of 400. The school has 23 enrolled students and two teachers (ACARA, 2012b). The school works closely with the broader community and other nearby school clusters to conduct sustainability and place-based activities, which include science and art-based wetland projects, tree planting and food garden/propagation.

![Figure 11: Mural in School Ground](image1.jpg)  \[Figure 12: Front Entrance to School\] (image2.jpg)

Heyfield PS

The population of Heyfield is approximately 2,000. The school has 147 enrolled students and nine teachers. Formerly a mill town, Heyfield is now a sustainable smart town. The school works closely with the broader community and conducts much of its sustainability effort through a food garden and extensive wetlands, which are opposite the school.

![Figure 13: Community Wetland](image3.jpg)  \[Figure 14: School Vegetable Garden\] (image4.jpg)
Stratford PS

Stratford PS has 100 students enrolled and nine teachers. The school community is involved in a range of sustainability initiatives including a Stephanie Alexander Kitchen Garden, a woodlands walking trail complete with interpretive signs and pictures, tree planting and action-based curriculum projects in the lower grades. Individual classroom teachers are developing integrated sustainability units.

Foster PS

Foster has a population of 1,100 and identifies itself as the gateway to Wilson’s Promontory National Park, which is the southernmost tip of Victoria (and the Australian mainland). The primary school, established in the 1870s, has 205 enrolled students and 13 teachers. The school is involved in several sustainability projects including ResourceSmart AuSSiVic, the Prom Coast Health Promotion Alliance and a Stephanie Alexander Kitchen Garden. This work is undertaken with the broader community.
**METHODOLOGY AND METHODS**

We used a qualitative case study design as a practical and comprehensive approach to assist our investigation into the development and implementation of sustainability education across the participating schools. Locating each school within a specific case study allowed us to examine the defining characteristics of each school. Once the attributes of each program were established we were able to identify a number of shared themes that occurred across each of the case studies. The collation of case study themes permitted us to develop a broader picture about the delivery of sustainability education across the participating Gippsland schools.

**Data collection**

The Monash University Human Research Ethics Committee (MUHREC-CF11/1991±2011001129) and the Department of Education and Early Childhood (DEECD-2011_001284) granted ethics approval for the study. As part of these requirements principals and teachers were required to provide signed consent prior to participation (see Appendices A and B). Each of the participating schools agreed to their identity being disclosed. School principals from the identified schools were contacted by phone and briefed about the nature of the study. They were told that the study was attempting to build an extensive overview of sustainability and place-based practices in Gippsland primary schools, and that it would be linked to the three week placement for 3rd year Bachelor of Education students enrolled in the subject ‘Understanding Space and Place’ in which the teacher educators (researchers) taught (see Appendix C).

Acknowledging the extensive research literature that identifies the lack of preparation of pre-service teachers to teach sustainability, we recognised the opportunity for pre-service teachers to be mentored by in-service teachers practising sustainability and place-based pedagogies. During our preliminary phone conversations we asked principals to identify suitable mentor teachers for the practicum placement (August–September 2012). We also asked schools to consider taking cohorts of pre-service teachers in order to support them as a collective who could undertake curriculum development and lesson planning together and in conjunction with the mentor teacher. A group of 20 pre-service teachers were allocated across the six participating schools. With the exception of one school that took six Monash students in three Grade 3/4 classes, and another school that took three students, the remaining four schools took two pre-service teachers each. Due to ethical reasons the pre-service students were not interviewed as part of this study and are therefore not represented in this report.

Three visits were made by the researchers to each of the participating schools. The first visit served as an opportunity to discuss the aims of the study, the nature of current sustainability initiatives within the school, arrangements for Monash University student placement, and to establish dates for focus group interviews. On the second visit we focused on talking with pre-service and mentor teachers about the practicum placement.
and the nature of any sustainability teaching and learning that had occurred. During the third and final visit to each of the schools the emphasis was on conducting focus group interviews with mentor teachers and principals, which were digitally recorded and transcribed.

**Research Journal**

The discussions during the first site visit to each school were recorded in a field journal. Notes were also kept about proposed ideas/projects for the placement experiences of preservice teachers.

**Semi-structured interviews via focus groups for each school**

In order to reduce the time demands on participating teachers and principals, all staff was interviewed together using semi-structured interviews with the following guiding questions:

- What key sustainability programs are taking place at your school?
- Do these programs occur across the curriculum in all grades, or do individual teachers undertake them?
- What is the role of the community in the delivery of these programs?
- What opportunities were Monash students given to develop and implement sustainability/place-based learning activities?
- What are some of the challenges to teaching sustainability?

**Photographs**

During the school visits teachers and principals gave consent for photographs to be taken of school ground features/landscapes (which did not include any images of children). Photographs taken at each of the sites provided a ‘flavour’ of how sustainability and place-based projects were being taken up in each school. Photos of bird boxes, painted totems, installations, water tanks, gardens, propagation sheds etc. (as highlighted on previous pages) were filed and became instrumental in assisting us to build a sustainability ‘picture’ of each of the participating schools.
ANALYSIS OF CASE STUDY DATA

All data, including teachers’ and teacher educators’ observations and reflections, transcribed interviews and photos, were analysed using a process of continuous coding that was done manually by the researchers. The resulting emergent themes provide a critical framework for (a) understanding the nature and scope of sustainability curriculum, (b) mapping the different ways sustainability and place-based work is taken up in the schools, and (c) recognising how pre-service teachers engaged with sustainability curriculum.

Rather than assemble individual/collective teacher responses to the specific research questions (as per the interview questions mentioned earlier), five emergent themes were identified and assisted our analysis of the data:

- Local/place-based focus
- Partnerships: community as curriculum
- Pedagogies for sustainability learning
- Garden-based learning
- Philosophical commitment
- Resources and funding
- Sustainability and place-based opportunities for pre-service teachers

Local/place-based focus

A place-based focus refers to sustainability education that is grounded in the nature of the locality or region in which it occurs. ‘Place’, the relationship between people and their geographical locations, is best understood through the settings and situations we live in, know and experience directly in our daily lives (Somerville, 2010). Place-based education is a process that makes deliberate attempts to engage people with the local, cultural, environmental and broader context of a place (Knapp, 2007; Orr, 2005).

As part of the implementation of place-based sustainability curriculum all the schools in this study use local outdoor sites. Here children are either engaged in learning at the school (school grounds and food gardens) or leave the school to engage in activities in the field or community (wetlands, woodlands, local creeks and rivers). These local places and their associated storylines provide a critical platform for integrating sustainability learning into a number of curriculum learning areas, including local ecologies, biodiversity, science, Indigenous education, mathematics, history and literacy. These contextualised and first-hand approaches to learning provide ‘real-life’ links to curriculum and experiences that deepen students’ understanding of sustainability.

These links are well illustrated in one of the smaller rural school communities that generates solar power from photovoltaics, which has wind turbines and a recently constructed desalination plant nearby, and which is less than 100km away from the Latrobe Valley coal-fired power stations. How might a teacher capitalise on the storylines embedded within each of these sites as a way of engaging children in the contested debate
about non-renewable/renewable energy and water harvesting? According to the principal, these ‘backdoor’ sites afford a logical gateway into examining 21st century approaches to energy and water production. Counter to the belief that the curriculum is ‘overcrowded’ and there is limited time to teach sustainability, these sites provide an ‘easy’ pathway for linking sustainability to local places. As the principal described:

[A teacher at the school] has initiated Waterwatch and is looking at the energy side of things. The Powlett River stuff he’s been doing is related to the water stuff here at the school so there’s been really good links ... he’s been doing the same with his electrical work and the solar power that we generate [at the school] so he’s tying environmental issues back into things that students can directly relate to. When I talk with my kids about electricity generation in the Latrobe Valley they sort of look at you with dumb faces because unless they’ve been to the Latrobe Valley and seen the open cut mines they can’t relate to it so they find it really difficult to understand. But when you talk with them about generating solar power or wind power which we can see the turbines from here, it’s things that they can see with their own eyes and have a better understanding of it straight away.

Two of the schools use nearby wetlands (one across the road from the school and the other a 20 minute bus trip) as part of making links to Indigenous and white history, geography, science, the arts, literacy, numeracy and other environmental issues. According to the teachers, because children spend regular time at these sites, making films, conducting biodiversity audits, water testing, ponding, participating in hunting and gathering activities, and researching the history of the wetlands, they tend to ‘think of it as theirs’, which is encouraged by the teachers. An integrated town planning unit framed by the wetlands encouraged students to consider issues of rubbish and storm water drainage. Teachers explain:

We can actually go out onto the road and stand there and look, and show the children how the stormwater drains down into the wetlands and say, “everything that you drop, all the oil, or everything ... and they can actually see where it is going to ... they can follow the path”.

In this sense, the place itself becomes a powerful tool that co-designs and co-teaches curriculum that requires students to ‘read’ the landscape in order to learn how places function.

**Partnerships: community as curriculum**

The majority of teachers and principals made reference to established and newly-formed partnerships with the broader community, including government and non-government authorities such as landcare groups, catchment management authorities, departments of sustainability and environment, men’s sheds, resource centres, parents, grandparents,
universities, volunteers and philanthropic trusts as key to the effective and successful delivery of sustainability education in their schools. This confirms the finding from our ‘Mapping sustainability initiatives’ study that partnerships are an important feature of sustainability education in the schools (Somerville & Green, 2013).

Furthermore, teachers indicated that they used the expertise of farmers, parents, field naturalists, community members and other service providers such as CERES (Centre for Education and Research in Environmental Strategies), Bug Blitz®, ResourceSmart and Waterwatch to contribute to learning experiences in place and sustainability education. These partnerships with outside groups and volunteers make the difference between the continuation and the demise of school-based sustainability projects. Partnerships with external organisations and community volunteers provide substantial leverage to the scope, longevity and momentum of place and sustainability education in schools. Teachers suggested that without external and community-based support, attempts to deliver sustainability learning would be significantly compromised.

As for the community partnerships, well without them things just wouldn’t happen. If the shire hadn’t got on board … we’d still be chucking all of our rubbish into the skip. Having people on the shire that were prepared to listen to what we had to say … the partnerships we’ve formed with the woodcrafters [to make outdoor garden furniture] and with Landcare have all had a direct impact on what the school’s been able to do.

In another school, we were told that:

Most of our volunteers – especially in the kitchen … are people who have no connections to the school whatsoever. So they’re not grandparents and they’re not aunts or uncles. They are just community members who believe in the program. And we’re getting more and more of those. I’m really quite blown away that they just come off the street and say, “Can I come and volunteer?”

The three schools in the Wellington shire all made reference to a local environmental program called Bug Blitz® (a Victorian philanthropic organisation) which involved working with a specialist environmental science teacher to conduct arts/science-based activities in local sites close by the schools. In these programs children participated in rotational activities focused on observing and photographing the more-than-human world of bugs, birds, insects and pond life, creating interpretive signs and pictures, and painting coloured bollards to represent that specific place. According to teachers these opportunities enable the smaller rural schools to come together for day long events, and present curriculum ideas that can be extended later on through classroom learning.

Being involved in other programs like Bug Blitz has meant that we linked up with other schools … there were bird spotting cards with pictures of different local birds that we see in our local environment. And the kids just thought that
was fantastic going around with binoculars trying to find these birds. And something so simple, they were just pegged on to branches, but they absolutely loved it. We had a look at different bugs that we could find; there were a few bugs that the kids were really excited to find because they’re not sort of really common.

The learning enabled by the various partnerships has a role to play in strengthening children’s environmental learning that, according to one principal, ‘incorporates values - individuality, respect, safety, growth and community’. These ideals were exemplified in activities that involved the establishment and restoration of native habitat on public and private land. The learning that often involved investigating biodiversity and wildlife of nearby places alongside numerous adult community members provides important ecological messages to students about the need to protect and care for local places, as indicated by one principal:

For some kids it might be the first time they’ve ever been beside a river or been out tree planting so it starts to have an effect ... an influence on their lifestyle that may not have been there before if they were just experiencing what their family generally experience ... it’s broadening their horizons.

These collaborations emphasise the important contribution of community-based social capital. Not only do the partnerships provide longevity to school-based sustainability projects, they also enable authentic and transformative experiences (for all stakeholders) through social and inter/cross-generational interactions. This was highlighted by two teachers who commented on a group of young boys who were invited down to the local Men’s Shed to learn how to build furniture as a way of re-engaging them with their learning.

**Pedagogies for integrated sustainability learning**

In this theme teachers described the pedagogies that enable the integration of sustainability education across the primary schools curriculum. A number of different approaches were taken to sustainability education by each of the schools, including waste management (recycling, rubbish reduction and rubbish-free schools), energy use (solar/water/renewables), food production and consumption (via food and community gardens), adaptation and conservation (tree planting/propagation and water testing) and Indigenous place knowledge. The establishment of ‘sustainability teams’ or ‘green teams’ made up of students from across the school was common. These teams worked with a teacher who assisted the school students to undertake a range of sustainability projects that were implemented throughout the school.

Sustainability learning in all programs tended to occur through action-oriented experiences with hands-on learning predominant. Pedagogical approaches invited students to engage in experiences that required the collection of information/specimens/data, problem solving,
investigation, collaboration, construction, digging and planting. Largely environmentally-based, the field activities also drew on cross curriculum areas to include arts, literacy and science experiences that were sometimes taken up later through classroom-based learning. The data suggests that the combination of integrative approaches and follow-up learning opportunities (as opposed to ‘one off’ experiences) increased the intensity and meaning of the learning.

This was particularly evident at one school that used an inquiry-based model before and after a wetland excursion, which encouraged students to tune into the topic, prepare, find out, sort, present and reflect on their learning. Using the wetland as a pedagogical framework, children develop questions about the nature of the site, its inhabitants and other phenomena associated with the wetland. Generative questions such as ‘do fish get bored’, ‘who are the inhabitants of the wetlands’, ‘is wetland water healthy’ and ‘what did Aboriginal people do with the wetland’, highlight the degree to which children are motivated to pursue a specific line of thinking that leads them to extensive investigation and a deepened understanding of the topic.

These integrative and inquiry-based learning models place students at the centre of learning where they work independently and autonomously in small groups in local places as part of their learning. Such autonomous experiences depart from traditional teaching methods in two specific ways. First, children are invited to learn in alternative and nearby geographies that exist beyond the classroom. Second, traditional practices that position teachers as knowledge holders and controllers of the learning space are challenged and replaced with alternative pedagogies that require teachers to step back. In direct contrast, children are positioned to take greater responsibility for learning that is supported and facilitated by the teacher.

In these models teachers scaffold the learning experience by putting in place structures that support children to be(come) independent learners, thinkers and knowledge producers. Teachers recognise how these authentic approaches to learning appeal to students who, they suggest, are liberated and motivated by the embodied learning. As one teacher told her students: ‘We will help you to work it out, and we will help you to work out where you need to go, and we can point you in the right direction but we’re not here just to tell you things’.

Within these pedagogical practices it is not uncommon for children to engage in spontaneous and open-ended peer teaching/learning that may or may not involve the intervention of the teacher. Sometimes these approaches generate more questions than answers. Teachers indicated that these approaches to teaching and learning not only opened up new possibilities for learning, but also provided opportunities to get to know students in new and different ways. We recognise these relational exchanges and dimensions of sustainability as a significant pedagogical component.
**Garden-based learning: producing knowledge and values**

Within the theme of garden-based learning we expand on the increasing contribution gardens are making to sustainability and place-based learning in primary schools. Seven of the eight schools had established food gardens that had become frameworks for learning ecological principles such as soil health, living systems, food webs and food chains that underpin food production. Across all of the schools, gardens were used as effective and productive outdoor classrooms that taught and supported children to weed, water, collect seeds for future planting, propagate, harvest, compost and care for the garden.

The two schools affiliated with the Stephanie Alexander Kitchen Garden Program (SAKGP) had extensive gardens that were used on a regular basis and were part of the ‘official’ curriculum for Grade 3–6 students. In this program specialist garden teachers are employed to coordinate and facilitate weekly garden sessions in collaboration with classroom teachers who also attend the sessions. For one program this included teaching students how to use tools such as drills, hammers, and saws (complete with a ‘tool licence’) for the construction of a chicken-house and propagation tunnel.

Teachers used the food gardens as a place to produce new knowledge and make important links across a range of subject areas. For example, arts-based projects such as making mosaic tiles for paving, building scarecrows and a sundial were recognised as important garden activities. Additionally, the gardens consistently framed numeracy and literacy learning:

> ... we’ve had to build the garden beds and measure where we were going to put them and step things out and block plant things in rows ... there are arrays of cabbages and things like that ... and in literacy they’ve researched things they can plant at this time of the year and if it’s a packet of seeds they can read the back and look at the map of Australia and see when they should be planted.

The smaller rural school gardens were more modest in size and curriculum integration, and were mainly used by particular individual classroom teachers on an ad hoc basis. Students accessed these gardens during lunch and recess when they took the initiative to water and weed plants. Despite this diversity of garden-based approaches, all teachers commented on the pleasure children gained from growing something in the garden. Teachers recognised food garden learning as an opportunity to make broader connections to global concepts such as food systems, food availability, food production and distribution, and highlighted the garden as a gateway for children learning the importance of using natural resources carefully, and to ‘care’ for the natural world.

In addition to being important sites that taught children how to grow food, teachers indicated how the school gardens had become critical sites that supported students who didn’t necessarily flourish in the traditional classroom. Their observations expose the garden as a place for opening up learning.
There are some children that really struggle, perhaps, with classroom activities, who just embrace the kitchen garden. They like the hard work. They like that sort of outdoor physical type work. And it’s an avenue for them to learn in a different environment. And even those that struggle socially, they’re happy out there in the garden, pottering around. There are a few like that and they’re happy in that world and they fit in better doing that. You never know – you don’t realise the children who perhaps have really poor learning skills to be the high achievers. And they can focus. Those ones that drive you nuts in the classroom because they can’t focus, they’re the ones that are just so with it in the kitchen or in the garden. They know exactly what’s going on. They are focussed and they’re on task.

In some schools food garden learning involved preparing food (both fresh and preserved by students) that was sold to the broader community through local markets, or onsite at the school. These activities were combined with visits to the local community garden where students engaged in philosophical conversations about the benefits and motivations of community-based volunteering. In asking the children, ‘Why would someone want to come and work in a garden that is not theirs?’ children grapple with the social, ethical and collective dimensions that underpin community life, which are inherent to the sustainability of local places and people.

**Philosophical commitment**

In our analysis of the data we identified a strong philosophical intent from many teachers responsible for ‘driving’ sustainability at each of the schools. Most schools had developed whole-school approaches to sustainability, which meant there was a level of commitment across the school community to incorporate sustainability into its curriculum, pedagogies and ethos (Sterling, 2005). Perceived as more than just ‘a subject’ that was taught as an add-on to other curriculum frameworks, most teachers understood the role of sustainability as ‘a way of being in the world’; not just as a temporary moment in time but as a permanent and fundamental dimension of children’s everyday actions and learning.

> [Children have] got to understand that doing sustainability, it’s not something that you ‘do’ and then you let go of it and it’s gone. It has to be something that you incorporate into your lifestyle ... it’s like we’re studying the world now, but after that we won’t talk about the world so much anymore. Sustainability has to be carried on all the time and probably through concrete things that you do in your room as well.

Based on this premise, we understand that learning and practising sustainability is bigger than merely teaching an environmental ethic, and is concerned with young children understanding themselves in the world in a different way, where they are taught and understand the implications of their actions, especially in relation to communicating with others.
[Sustainability is] a life skill they’re learning at school and you can see a big difference between the children that are coming up from Prep 1/2 to the children already in Grade 5/6 who aren’t really interested because they haven’t been through this. We have a thing called circle time where they sit in a circle and they talk about how they would like to be treated or how other people treat them and then children will give suggestions ... if you’re feeling a bit lonely maybe you could do this or maybe you could do that. And it’s a really powerful time ...

These deeper notions of sustainability that are framed by teaching values were brought up by a number of teachers, and were particularly emphasised in the Catholic school where children as young as five learn the significance of care and respect through a unit called ‘We care for our world’. As part of their learning students receive the message: ‘It’s God’s world and God created it for us ... God has given us our environment to use and we’re expected to care and be stewards ... respect for self, respect for the classroom, respect for our place’. Older students are encouraged to take up the value of judgement that ‘... if we’re making good judgement we’re looking after our world, because that’s an important part of who we are and how we relate to other people and how we relate to our environment in terms of caring for it’.

We understand that these philosophical underpinnings have a critical role to play in extending and expanding children’s sustainability learning, and tend to be taken up when teachers consistently refer to, and remind children of the impact of their environmental and social actions.

**Funding and resources**

Data suggests that the limited and shrinking availability of funding for sustainability projects has a profound impact on the permanence and momentum of sustainability initiatives in schools. Not surprisingly, all schools required diverse funding sources to commence and maintain sustainability initiatives. Major funding was pursued from outside organisations such as Landcare, Esso, Coles, and local shires (usually via rigorous application processes) that provided small-scale grants (up to $1,000) to ‘kick-start’ projects. School and community-based events provide additional funding, usually from the production/selling of seedlings and plants and food and preserves at the school or at local markets. Annual events such as farmer’s fairs and fetes, barbecues and other school events were commonly cited as mandatory ‘money-spinners’. The schools in this study are mostly small to medium-sized, and exist within rural and low socioeconomic areas. These realities have a significant bearing on the availability of ongoing resources.

Without additional funding (either through grants or via the generosity of the broader school community) the data suggests that schools are unlikely to continue with their place-based sustainability projects. This dilemma was raised from most schools that cited the demise/reduction of projects either due to a lack of funding or from the departure of the
‘driving’ teachers. The two schools associated with the SAKGP explained how they initially receive generous funding to commence the kitchen/garden project but are then expected to generate thousands of dollars for the continued employment of kitchen and garden teachers once the initial phase of funding is finished. Not meeting these commitments has meant reduced teaching hours for gardening and kitchen staff.

In response to these circumstances, schools have embarked on strategic and entrepreneurial initiatives in order to generate extra income. One of the smaller schools works with local people who make and sell cow sculptures (see Figure 12 above) to raise funds for the small two teacher school. Another school has commenced a highly successful calf-rearing project that raises hundreds of dollars that are funnelled directly back into the kitchen/garden program.

**Place-based sustainability education for pre-service teachers**

In this final theme we drew on mentor teacher observations and comments about the implementation of sustainability and place-based education during the three week placement period. In what follows, we identify some of the ways pre-service teachers were encouraged by mentor teachers to conduct sustainability and place-based learning within their practicum placement.

Many of the pre-services teachers ‘buddied up’ their respective classes to undertake a range of sustainability initiatives with university peers. For example, the older students from a Grade 5/6 class worked with Grade 3 students to participate in an activity that was part of a broader Landcare project. The ‘bird’s eye view’ lesson included the mapping of native/introduced vegetation, buildings, playgrounds, pathways and other sites. Not having used collaborative approaches previously, teachers were surprised at how effectively the activity brought students together for effective and fun learning that harnessed collective school ground knowledge. Similarly, two pre-service teachers working at the Grade 5/6 levels brought their classes together to make papier-mâché pots for seed propagation/planting as part of a maths lesson. According to the teachers, students hadn’t realised it was a maths class because they were out in the garden.

In another example, one pre-service teacher was mentored to undertake energy goals/audits with six and seven year olds who were examining energy use at home and at school in conjunction with ‘carbon footprints’, ‘greenhouse gas’ and ‘fossil fuels’. Biodegradable and non-degradable rubbish buried in the school ground by children provided learning about the implications of manufactured products, recycling and landfill. Whilst many adults are unfamiliar with such sophisticated concepts, the pre-service teacher learnt that when activities are embodied then graphed, recorded, reflected on and documented, young children have great capacity to make important links between sustainability learning and ‘the impact of their actions’.
When asked how pre-service teachers responded to place and sustainability teaching and learning opportunities on placement, many teachers commented on how surprised the pre-service teachers were about the effectiveness of practical lessons that captured student attention and interest for extended periods. Significantly, pre-service teachers were amazed at children’s extensive sustainability knowledge (even in the infant classes), particularly in the schools where sustainability practices are widespread and have been in operation over a period of years.

The suggestion from in-service teachers that sustainability practice become ‘everyday language’ for beginning teachers highlighted the importance of embedding sustainability across all learning areas modelled through daily classroom interactions. ‘Recycling’, ‘rubbish-free lunches’, ‘cloth bags’, ‘communication with others’, ‘no throw-away bottles’, ‘lunch in a container’, ‘switching off lights’, ‘treating each other well’, ‘caring for places’, and ‘acknowledging children for their active engagement in practising sustainability’ were cited as important dimensions of sustainability. Significantly both the social and environmental dimensions of place and sustainability are highlighted as important. Rather than being viewed as a topic to be covered once a year or as a specific unit of work, sustainability and place-based education described in this light becomes a way for children to think, act, read and be in the world on a daily basis.

CONCLUSION

The executive summary at the beginning of this report offers an overview of the findings in relation to the schools that participated in Year 2 of the longitudinal study. The study expands our current understanding about the ways schools are envisioning and responding to 21st century social, environmental and economic challenges. Overwhelmingly the majority of initiatives are underpinned by social capital, community links/partnerships and intergenerational relationships that work towards a sustainable future. Integrated sustainability education programs rely on teacher motivation and expertise and remain dependent on funding opportunities, which are crucial to the success of the programs.

Effective sustainability learning is embedded through school philosophy and curriculum via whole-school approaches that are supported by principals, teaching staff and the wider community. The longevity of sustainability programs and indeed the sustenance of teachers who are the sole ‘drivers’ of initiatives are compromised without the broader support of the school community.

The opportunity to conduct research with the participating schools has necessitated and led to newly developed relations between Monash University and the schools. As a consequence of this study, pre-service teachers have gained first-hand experience of developing and implementing place-based sustainability education.
REFERENCES


APPENDICES

Appendix A: Explanatory Statement: Teachers, school principals and community experts

Education for Sustainability: Linking teachers and teacher education students in place-based learning
This information sheet is for you to keep. Please read it before you decide to participate.
Margaret Somerville, Professor of Education, and Monica Green, Lecturer in Education, are teacher educators from the Faculty of Education at Monash University Gippsland. We are inviting you to take part in a collaborative action research study involving school teachers and teacher educators reflecting on the implementation of place-based sustainability education curriculum for primary schools and teacher education. The aim/purpose of the research is to conduct and record three cycles of action, observation and reflection over a three year period for the progressive development of place-based sustainability education curriculum for schools and teacher education.
Possible benefits
Through cycles of action, observation and reflection in the development of innovative programs in sustainability education we will improve teachers’ knowledge and practice and the learning outcomes for the children and their communities and places. Learning about local places and how to care for them is perhaps the most significant aspect of Education for Sustainability and a beginning point of climate change education for young children.
What does the research involve?
The study involves teachers, principal/deputy principals, and community experts participating in: a two hour focus group at the end of the action cycle; and a one hour semi-structured interview. This process will be repeated each year for 3 years with consent to participate invited on an annual basis.
How much time will the research take?
Focus group: 2 hours
Semi-structured interview: 1 hour
Total time: 3 hours
Inconvenience/discomfort
There is no inconvenience or discomfort expected in this research.
Can I withdraw from the research?

Participating in this study is voluntary and you are under no obligation to consent to participation. If you do consent to participate, you may withdraw from further participation at any stage but you will only be able to withdraw data that personally belongs to you as an individual.

Confidentiality

Participants will be asked if they wish to remain anonymous for the purposes of local reporting. In relation to all academic articles produced from this research individual participants will be anonymous.

Storage of data

Data collected will be stored in accordance with Monash University regulations, kept on University premises, in a locked filing cabinet for 5 years.

Use of data for other purposes

With your permission the anonymous data from this project may be used for a future project with Norwegian researchers about enabling place pedagogies in primary schools.

If you would like to contact the researchers about any aspect of this study, please contact one of the Chief Investigators:

<table>
<thead>
<tr>
<th>Margaret Somerville</th>
<th>Monica Green</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="mailto:Margaret.Somerville@monash.edu">Margaret.Somerville@monash.edu</a></td>
<td><a href="mailto:Monica.Green@monash.edu">Monica.Green@monash.edu</a></td>
</tr>
<tr>
<td>51226160</td>
<td>51226364</td>
</tr>
</tbody>
</table>

If you have a complaint concerning the manner in which this research is being conducted, please contact:

<table>
<thead>
<tr>
<th>Executive Officer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monash University Human Research Ethics Committee (MUHREC)</td>
</tr>
<tr>
<td>Building 3e Room 111</td>
</tr>
<tr>
<td>Research Office</td>
</tr>
<tr>
<td>Monash University VIC 3800</td>
</tr>
<tr>
<td>Tel: +61 3 9905 2052 Fax: +61 3 9905 3831 Email: <a href="mailto:muhrec@monash.edu">muhrec@monash.edu</a></td>
</tr>
</tbody>
</table>

Thank you,

Margaret Somerville
Appendix B: Consent Form: Teachers and school principals

MONASH University
Education

Education for Sustainability: Linking teachers and teacher education students in place-based learning

NOTE: This consent form will remain with the Monash University researcher for his/her records
I agree to take part in the Monash University research project specified above. I have had the project explained to me, and I have read the Explanatory Statement, which I keep for my records. I understand that agreeing to take part means that:
List all procedures relevant to your data collection – delete those not applicable

I agree to be interviewed by the researcher [ ] Yes [ ] No
I agree to allow the interview to be audio-taped [ ] Yes [ ] No
I agree to participate in an audio recorded focus group [ ] Yes [ ] No
I wish to have my name identified in relation to this project [ ] Yes [ ] No
I agree that this material can be used in future research [ ] Yes [ ] No

I understand that my participation is voluntary, that I can choose not to participate in part or all of the project, and that I can withdraw at any stage of the project without being penalised or disadvantaged in any way.

I understand that any data that the researcher extracts from the interview/focus group for use in reports or published findings will not contain names or identifying characteristics, unless otherwise specified on this form.

I understand that I will be given a transcript of data concerning me for my approval before it is included in the write-up of the research if I request it.

I understand that data from the interview/focus group/transcript/audio-tape will be kept in a secure storage and accessible to the research team. I also understand that the data will be destroyed after a 5 year period unless I consent to it being used in future research.

Participant’s name __________________________ Signature __________________________ Date __________________________
Dear Principal and Student Teacher Coordinator,

Thank you for participating in our Mapping sustainability initiatives in regional Gippsland schools and communities study. Your school has been identified as having a program of excellence in sustainability education and has indicated an interest in being involved in further research. We are currently undertaking a study called Place-based Education for Sustainability: Linking teachers and teacher education students in place-based learning.

The aim of the project is to document the learning of teachers, teacher educators, and teacher education students throughout a Unit of study in which the students learn from the school teachers and design and conduct an activity in the local wetlands. As part of this Unit our students are required to undertake a 3 week practicum from August 20–September 7, 2012 (inclusive). In the first cycle of our project, in 2011, most of our students were placed in schools with no sustainability education. In the second cycle of the project, in 2012, we are hoping to place clusters of 4–5 of these students in Gippsland schools where they can experience teaching and learning related to education for sustainability. The cluster placement will enable Monash students to work together to support education for sustainability in your school. We believe the placement will develop a broader understanding of the pedagogies and curriculum that support education for sustainability.

We would like you to complete the attached form indicating your interest in participating in this exciting initiative. The placement will be well supported by the Unit of study, visits from the teacher and advice and support as required. We look forward to your response and to your interest in being part of this project. If you would like to discuss the project further please contact Monica Green on monica.green@monash.edu Phone: 0407 547 445, or Margaret Somerville on Margaret.Somerville@uws.edu.au.

Kind regards

Dr Monica Green and Prof Margaret Somerville
Appendix D: Placement participation for schools

MONASH University
Education

Invitation to support the Place-based Education for Sustainability: Linking teachers and teacher education students in place-based learning research project

2012 Professional Placements Program
Bachelor of Education (Primary)

Please complete the following information and return the form no later than 30 March, 2012

☐ Yes, we are interested in taking a cluster of Monash students.
☐ We’re not sure, so would like someone to contact us with further information to help us decide.
☐ No, we are not interested at this time.

<table>
<thead>
<tr>
<th>School Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contact Person:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contact Person’s email address:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contact Person’s phone number:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

How many Monash B.Ed pre-service teachers can your school accommodate? Our preference is for groups of 4-6, but please offer the maximum number of places possible for your school (i.e. if you would like to participate but cannot accommodate 4-6).

<table>
<thead>
<tr>
<th>Special Requests:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

Please return this form no later than 30 March 2012

EMAIL: Miriam.potts@monash.edu
FAX: (03) 51 22 6978
POST: Faculty of Education, Monash University, Northways Rd, Churchill. 3842 Victoria

