



Australian Government

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International Agricultural Research

Building global sustainability through local self-reliance

Lessons from landcare



Monograph 219

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List of shortened forms

| | |
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| ACIAR | Australian Centre for International Agricultural Research |
| AMAEP | ACIAR Mindanao Agricultural Extension Project |
| AT Uganda | Appropriate Technology Uganda |
| CAO | City Agriculture Office |
| CBDRR | community-based disaster risk reduction |
| CBRM | community-based resource management |
| CENRO | City Environment and Natural Resources Office |
| CGIAR | formerly the Consultative Group on International Agricultural Research |
| CLEA | Community Learning for Environmental Action |
| CSIRO | Commonwealth Scientific and Industrial Research Organisation |
| FAC Net | Fire Adapted Communities Learning Network |
| GDP | gross domestic product |
| ICM | integrated catchment management |
| ICRAF | International Centre for Research in Agroforestry |
| IUCN | International Union for Conservation of Nature |
| KADLACC | Kapchorwa District Landcare Chapter |
| KCLID | Kagawa Canal Land Improvement District |
| Landcare Australia | Landcare Australia Limited |
| LID | land improvement district |
| LIFE | Livelihood Improvement through Facilitated Extension |
| NAACP | National Association for the Advancement of Colored People |
| NAADS | National (Uganda) Agricultural Advisory Services |
| NRM | natural resource management |
| NUISE | Nanzan University Institute for Social Ethics |
| OBLA | Olo-clofe B'laan Landcare Association |
| OECD | Organisation for Economic Co-operation and Development |
| PCAARRD | Philippines Council for Agriculture, Aquatic and Natural Resources and Development |
| PULL | PCAARRD-UP Mindanao-Landcare LIFE |
| ROCP | Regional Onsite Conservation Program |
| RMIT | Royal Melbourne Institute of Technology |
| SDGs | Sustainable Development Goals |
| TOFA | Tuban Organic Farmers Association |
| UN | United Nations |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |
| UNHCR | United Nations High Commissioner for Refugees |
| UNU-LRT | United Nations University Land Restoration Training Programme |
| WWF | World Wide Fund for Nature |



PART F

Laying the groundwork for landcare's future



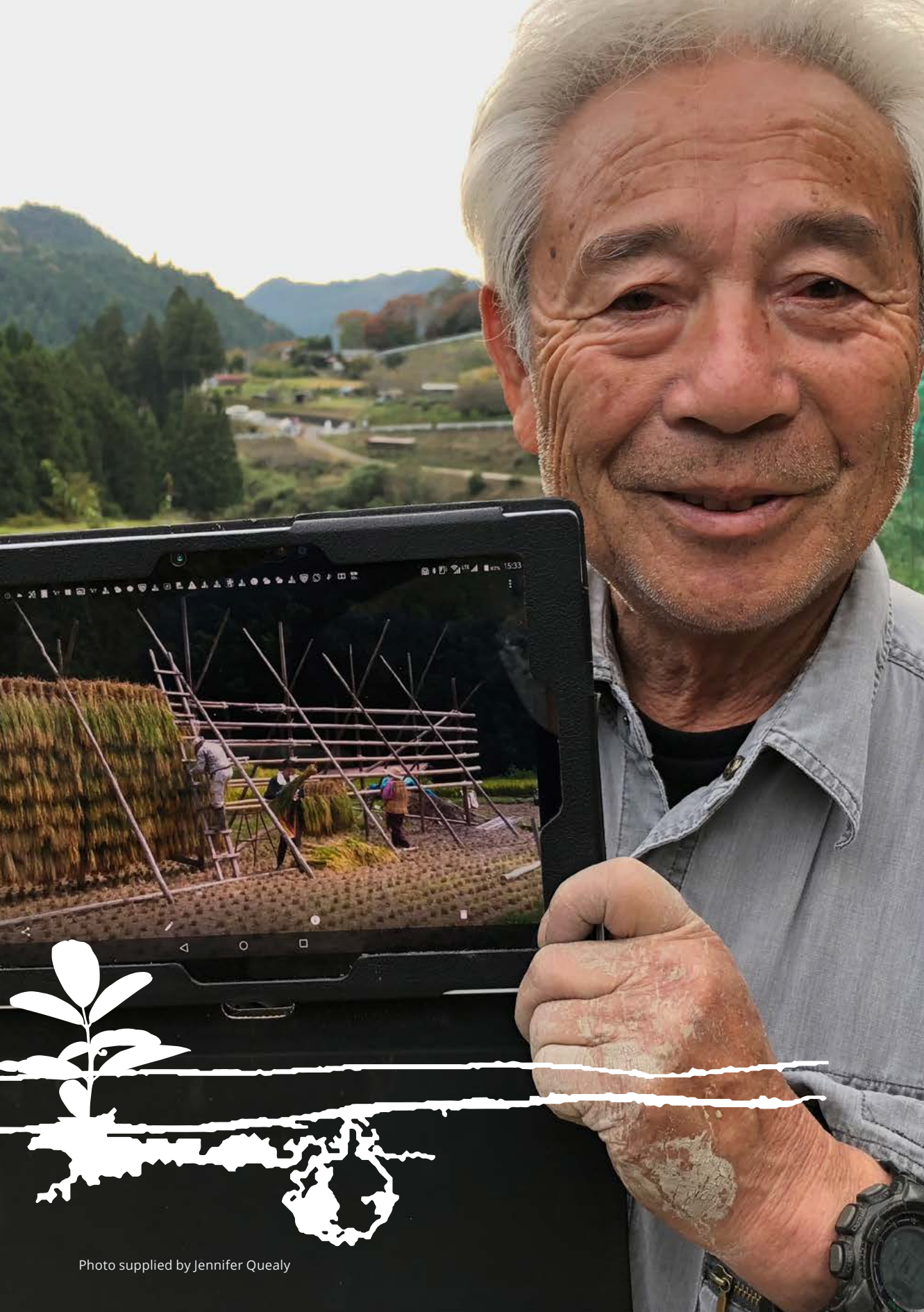


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CHAPTER 25

Landcare practice: from little things, big things grow

Jennifer Quealy



Abstract

This chapter explores Australian landcare to distil a model that can be shared to build local self-reliance. It lays the groundwork for developing landcare further, and beyond Australia, to become a globally significant network for community-level sharing of knowledge and practices, for investment into community networks, and to support climate change adaptation outcomes. The landcare model essentially involves neighbours collaborating on self-driven local projects to meet the needs of local people. Additional developments and benefits bring and build community capacity, self-reliance and resilience alongside escalating global climate change impacts. This accessible and pragmatic model of community self-reliance and resilience, knowledge-sharing and capacity building can be adapted and applied anywhere by individuals, families, producers and communities. Landcare is an open-access and low-cost community approach that is an ideal grassroots response to global needs and programs. It is becoming even more successful, recognised and supported by non-government organisations, governments, business, industry and the wider public. Landcare enables people to experiment in ways to care for their land, environment and community (with support) and to create local social, environmental and economic outcomes and impacts for whole nations.

This chapter reveals the core features, benefits and drivers of Landcare that any community could pursue. The landcare model would assist communities to create community purpose through ingenuity, to build localism and agency, for wellbeing outcomes for people and communities, as well as productivity and sustainability for landscapes. This chapter provides guidance and recommends an online, landcare-specific knowledge-sharing database, accessible to the world, creating a global Landcare Academy. It would be a platform for sharing knowledge about how to 'learn and build stuff' in the landcare labs (the farms and shared spaces) of the world.

Introduction

This chapter offers insights into some ideas from people engaged in landcare over this past 30 years, and points to expertise and references on both the practical and theoretical aspects of landcare that others might find useful in creating their own version of landcare. This model is not hierarchical or prescriptive; it is an evolving, dynamic, sometimes disruptive and ultimately enlightening, process and network. Members gets things done for the good of their people and the place they live and work in and enjoy. Landcare is about groups, and their on-ground projects that have social, ecological and agricultural impacts. It is also about getting friendly with researchers, scientists and agency people, sharing knowledge, energy and other resources for the best impacts possible. Landcare involves risk-taking – trying new practices in a safe, supported space where mistakes can be made. It is about finding innovative ways to deal with both new and persistent issues. Landcare helps rebuild community capacity, resilience and self-reliance. Groups cultivate local ingenuity and purpose through their practical, shared care, repair and development of landscapes and enterprises. Landcare’s very essence eschews the principle of subsidiarity, which is the key theme of this book. This is the landcare model.

Landcare has been greatly influenced by wilderness and environmental conservation movements and the needs of peri-urban and coastal communities and the landscapes they are caring for. It has also been a collaboration between science, researchers, schools, governments, industry and the public. It has taken a broad-spectrum approach and is a broadly supported community group action model that could be applied to any community and place. Equally, the Australian landcare movement can learn from communities in other nations. There is much in both developing and over-developed nations, their histories and practices that can guide the ongoing evolution of the landcare model.

Many Landcare groups have different versions of the basic model but they share some characteristics: a network of local people and organisations who aim to protect and regenerate landscapes that have degraded, usually by working together, sharing experiences and knowledge. They reach out beyond their local area, invite others in, host visits and visit elsewhere. They make friends and build partnerships. Ultimately it is local people with a common aim, trying new methods to care for their lands and livelihoods, and building local self-reliance within individuals, enterprises and communities.

Landcare emerges from the dust of droughts and other scars of land use

The focus of the last 30 years (1990 to 2020), since landcare was initiated by farmers in Australia’s rural Victoria, is of a movement that followed 200 years of introduced land management paradigms and methods – practices that transformed landscapes through a radically different European-style management of this country from that previously practised by Indigenous nations.

The introduced transformations may have been hugely productive, growing the nation into a major global exporter, but they haven’t all been ideal. It became clear in the 1980s that the country was impacted by widespread land and water degradation. Communities, productivity and biodiversity were suffering unintended impacts. Something needed to change. A radical rethinking began, and it continues to evolve.

The broader context and precursors to landcare were both the Australian networks of environmental groups and farmer associations. All were coming to similar realisations with knowledge from researchers, scientists and agencies about the actual spread and types of degradation that were occurring – and escalating.

Introduced farm practices were compounded by droughts and other degrading processes, causing productivity and biodiversity losses and impacts on the wellbeing and survival of regional and rural communities.

The period from the 1990s to now has seen a steady (and lately dramatic) nationwide escalation of losses of biodiversity and compromised ecologies, despite landcare efforts. There have been many steps forward, but there is still much to learn, build and do.

The landcare concept almost didn't come soon enough.

The 1980s was a time that required a creative rethink of how to manage land and water resources. How could we farm with growing evidence of degradation and what could Australia's landscapes sustain? How could we increase productivity while caring for a degraded land and natural resource base? How could we respond to dramatic losses in biodiversity? It also heralded the beginning of a time of reflexive rediscovery of the way the original Australians managed the land. Indigenous Australians had largely been dispossessed of that much misunderstood (yet knowledge-rich) capacity and role. While some incredible productivity and wealth generation was possible in the century after colonial settlement and change, Australia has been grappling with 'wicked' challenges as a result ever since. The increasing population and settlement patterns and methods have both exponentially compounded this scenario.

What developed into the post-Indigenous landcare farming model, emerging during the late 1980s, has become a popular and critical action-focused network of groups across the nation. The experience of thousands of active groups enables us to draw on 30 years of grassroots activity and knowledge. The best of landcare, however, combines understanding from both the modern Australian landcare experiment, as well as the deep and complex understanding of Australian landscapes through Indigenous knowledge. Historians, ecologists, farmers, researchers and practitioners have recently flooded the Australian consciousness with a deeper and more comprehensive understanding of Indigenous landscape management knowledge and practices. Works by Indigenous Elders, for example on 'cultural burning', and on Indigenous farming practices, have been uncovered and documented by researchers including Bruce Pascoe, Bill Gammage and Charles Massey. This is greatly assisting transformative thinking. These works are helping to further develop the landcare model.

Science tells the compounding story that communities were facing

Farmers and environmentalists haven't been alone in this. Science, industry and governments have been instrumental partners who are critical to the landcare model. The New South Wales Soil Conservation Service published a survey of land degradation in New South Wales in 1992 (Graham 1989), after a two-year statewide research project that mapped the widespread and devastating incidences of 10 different forms of land and water degradation that impacted farms and landscapes, and the communities and families that rely on them. This survey, published just a few years after the official start and recognition of landcare in Australia and the devastating drought of the late 1980s, indicated what land

managers and regional communities were struggling with, and needed new approaches to deal with, at a time when Landcare groups began appearing in districts across the country. From that relatively simple survey to initiatives and programs like the *Atlas of Living Australia* and hundreds of programs and initiatives, science is engaging communities in monitoring, recording, mapping and understanding approaches to and new practices for our shared challenges. Citizen science now rides on the back of Landcare networks, with initiatives like *RabbitScan* engaging grassroots networks, schools and communities to assist scientists and policymakers to respond to particular challenges.

The landcare model evolves

Landcare is now a much-loved, 30-year-old Australian action and research network that has high public recognition among the Australian community and growing recognition globally. It has had its ups and downs, regarding funding support and prominence, and competition with other programs and approaches. But it has survived, thrived and evolved. Landcare has also become an actor in community development, building connected communities with immense new capacities and readiness. Thousands of Landcare groups across Australia assist with major challenges wrought by climate change, and the impacts of increasing natural disasters and emergencies, on rural and regional communities and landscapes. Landcare networks in Far North Queensland were critical players following cyclones Larry and Yasi. Their local knowledge, strong networks and ability to activate quickly and expertly have been critical to achieving recovery.

Landcare groups and members drive ingenuity in approaches to challenges. This is increasingly important with increasing impacts from climate change across all landscapes. Landcare networks play a role in preparation (of people, practices and methods, and of properties and landscapes) and in building resilience in systems and place. Landcare groups are also critically important in recovery. They are local, have knowledge, connections, skills and experience, and are there 'for the long haul'.

Landcare groups grow to expand their view and aims, and through sharing knowledge, take on more complex issues and challenges. A subsequent key feature is that, after initial small project successes, most Landcare groups, encouraged by what they can achieve as a group, plan 'bigger', and seek support from others to take on broader projects. Landcare groups can 'wax and wane' in activity, but are there when a community needs them, and the group can quickly re-emerge; this is particularly seen (and useful) in emergency and natural disaster scenarios.

No two Landcare groups are exactly alike. Each group forms its own committees, membership networks (often based on catchment or district boundaries), plans of action and aims and objectives, often becoming a formal committee with some basic legal protections (incorporation and insurance). Many of these groups still exist, alongside and partnering with other important local groups like the bushfire brigades, country women's associations, Red Cross and service groups like Lions and Rotary.

Landcare's global presence – talk it up!

Landcare has spread globally largely by word of mouth. Australian Landcare group members have reached out over 20 years to communities in 22 countries, offering help and encouragement and giving practical and financial help on small projects. But for all the benefits, landcare has very little profile in global food security, biodiversity conservation,

community development, regenerative agriculture and climate change adaptation, self-reliance and resilience programs. A key reason for this may be the lack of a cohesive and coherent landcare model that could slip easily into global discourse (and support) around agroecological, food security and climate change programs and policies.

We need to better define landcare as a model for discourse with these global fields and players. Landcare is a relevant, adaptive community-based model of care for people and places that can fast track knowledge sharing and capacity building. Landcare assists communities to build their resilience and self-reliance. Landcare can assist government, industry and business to support community knowledge and action. It is a model that can be adapted for any community, anywhere in the world, to approach any problem, challenge or vision.

[Landcare] is a model that can be adapted for any community, anywhere in the world, to approach any problem, challenge or vision.

Through this process, Australian landcare practitioners could continue to improve their practice by connecting with and influencing new global collaborations. Landcare will continue to be adaptive to new and improved outcomes and collaborations that are critical for global responses to climate change impacts. Additionally, many landcarers are willing and able to share their expertise and passion for landcare, both within and outside Australia.

Building a useful global landcare model will require a more sustained look at how Landcare began and adapted. Landcare groups have regularly invited community and agency experts to speak at Landcare meetings, field days and conferences. Landcare groups have also been highly engaged in reaching out to others. Much landcare activity revolves around tours to other districts to see how other groups are working. Landcare is a safe space, in kitchens, on farms, in community halls and schools, in council chambers, agency offices, libraries and business venues. Landcare is nearly always a social gathering. This explains how landcare has developed into a transferable model of self-reliance at the community scale, bringing local farm-based knowledge and learning together with science, innovative extension, Indigenous need and knowledge, and developing interactions with unlikely, unusual but transformative partners and collaborators. And it's all done at social occasions and with homemade food!

This review in this book is very timely, as landcare has reached maturity and can share useful, pragmatic and practical content through its many advocates. This enables researchers and practitioners to analyse the landcare 'model' to determine how it can develop further. Readers are encouraged to collectively reflect on, share and distil the essence of landcare, so we can state what the shareable model needs to contain. We need an 'elevator pitch' and a smart definition for a global 'Everyone, Everywhere, Landcare' model to define landcare as a legitimate and potentially important world model of local and empowered self-reliance, and ground landcare as a continually adaptive model within a context of climate impacts on agriculture, food security and ecology. At the centre of this is the role landcare plays in community knowledge sharing, self-discovery and project co-development.

A useful starting point is the findings of social researcher Hugh Mackay's 2010 research in his book *What makes us tick: the ten desires that drive us*. Mackay's research found that people are driven by the social need to:

- be taken seriously
- find their own place in the world
- have something to believe in
- connect (with each other and nature)
- be useful
- belong (be connected through small 'herds' of five to eight people, as well as larger groups)
- have more and more (experiences and better engagement)
- have control (over their lives)
- have something happen
- experience love.

This list is a useful place to start when thinking about landcare as a model of subsidiarity because landcare is first and foremost about people and what drives them to connect, learn, act and care. Landcare connects people to place and with their community. Landcare connects people with nature and allows people to feel useful, to belong and to have meaningful experiences, even through uncertainty. Landcare enables people to find their place in the world and have something to believe in. The landcare model can easily reference these 10 desires as intrinsic values of landcare. Landcare meets the basic needs of people, and, like the hierarchy of needs, they are precursors for a community to look after shared places and resources.

For landcare to be globally relevant and useful, it needs to be understood and helpfully defined.

For landcare to be globally relevant and useful, it needs to be understood and helpfully defined. This start-up model and guide can be shared and adapted to suit local circumstances and needs of people and place. This guide need not be definitive, just instructive. Landcare is best when it avoids being too academic, bureaucratic, amorphous or unwieldy. Landcare needs simplicity and needs to be practical, understandable and shareable. Landcare also needs to be grounded enough to be useful to the 'herds' we all hang out with. Landcare needs to have the characteristic of 'plasticity' – a term arising from the neurosciences – so it can change its form and be modified to suit the community's needs. These underlying attributes form the core adaptability of the landcare model.

Building self-reliance and resilience into the landcare model

Landcare starts with local self-reliance, which, when coupled with resilience thinking and recovery practice, builds the capacity of individual members for bigger-picture capacities. Early in their development, Landcare groups need to be both self-reliant and resilient.

They may start as a small group and develop networks and skills as they grow. With support, they can become empowered and then become able to develop sustaining partnerships with others. During this process of growth, some Landcare groups slip into a (less sustainable and less desirable) co-dependency with funding organisations. This can steer the group towards doing what others want them to do, rather than staying clear about their own needs and aims. Guidance from publications like *Working together for land care* (Chamala and Mortiss 1990) can help Landcare groups with effective strategies for starting and continuing a local group's growth, development and achievement.

Across Australia, many groups are moving back to a stronger self-reliance approach, recognising their purpose as being about more than chasing after grants, partners and sponsors. Self-reliance for Landcare groups is about having greater ownership of their own processes and resources and bringing in partners to help achieve that. It's about resilience thinking, matched with shared values of community-level self-reliance. To borrow a phrase from the 1970s and 1980s, landcare is an excellent example of the 'think global, act local' mantra. When and if Landcare connects to global networks and resources, it will be recognised that the landcare model can contribute to the greatest challenges of our times. Global networks and organisations can greatly help empower local groups through knowledge-sharing and resourcing and by building connections with supporters.

Landcare needs to keep its community grassroots origins and avoid becoming a (less-empowered) service-delivery provider for government, industry or corporate organisations. A local Landcare group that cares and works locally on natural resources and community, with a strong sense of self-reliance and resilience thinking, fits neatly into need for action to keep within the limits of our planet's resources (see, for example, the concept of planetary boundaries, as defined by the Stockholm Resilience Centre (2014)).

Landcare in Australia passed its 30-year milestone in 2019 and we increasingly share this landcare model with the world. But instead of thinking we've 'made it', and continuing to do what we've been doing, landcare desires change, an improved model and further sharing of the knowledge and experience both within Australia and around the globe. This is especially important for other nations that are interested in developing their own forms of this community-built movement. It is equally important for Australian landcare to remain fresh, relevant and supported, so it can continue its popularity, achievements and growth. The next stage for landcare is recognition within other important global networks for climate change adaptation, food security and biodiversity conservation. This is where the landcare model can both give and receive, and excel.

The partnerships that Landcare has built over the past 30 years are critical. Landcare can't go it alone. While this seems to contradict the emphasis on self-reliance and resilience thinking, it is in fact essential to both. Subsidiarity requires good decision-making at all scales (global, national, provincial, regional and local). Landcare requires continuing deep partnerships with researchers, government, business, industry, and education, media and corporate sectors as well as with the unexpected, the left out, the forgotten and the silent voices. When Landcare forms partnerships with the unexpected, resilience is enabled and self-reliance is empowered.

Landcare is not a uniform experience for everyone or every group. It can be hard to capture as a concept and tricky to define and share, particularly with other nations and cultures but sometimes even with our own neighbours and families. But that shouldn't stop us trying to gain acceptance and support.

This model for landcare is not prescriptive – it is a flexible and dynamic guide that states the essence of landcare in a way that others can share. It needs to include a simple short definition (an ‘elevator pitch’) so that anyone can say what landcare is and means. It also needs enough depth to warrant easy adoption by individuals and groups anywhere.

Landcare deserves a greater global presence among the more prominent sustainability networks – it has much to offer as a flexible, adaptive and powerful model for local action and influence. The driver is that landcare is sought-after and being modified by other communities across the world. Collectively, we need to continually adapt the landcare model, by defining and testing our landcare experience with the experience of other cultures and people. We know we have much still to learn and adapt as our needs for landcare change and mature as well. We need researchers and practitioners to collaborate further to provide the basic model for others to use, based on the findings in this publication.

Landcare can be summarised by outlining some useful characteristics and features with a simple theme, along the lines of ‘Everyone, Everywhere, Landcare’. Landcare is about caring for the land and the community, by people, anywhere and everywhere needed. Landcare has already been modified to suit coastal, school, urban and peri-urban places and people, while retaining this very generic theme. The definition needs to be simple, so people can start with a basic understanding of the role and concept of landcare and create their own customised local model.

What comes next? What must be included in the list of characteristics of landcare? Are there rules, principles and practices? Would other places and cultures find the model suitable for the issues they face and the way they organise and operate? What does landcare offer to communities around the world? How is it linked with sustainability, food security, the United Nations Sustainable Development Goals, environment and conservation initiatives and needs, and natural disasters and emergency management issues and challenges?

How some Japanese communities and researchers are approaching wicked regional challenges through an emerging landcare model

In November 2016, a small group of Australian and Japanese academics and landcare practitioners visited regions and communities in regional Japan that were going through immense changes and challenges following various disasters. The group met amazing and resilient people, including farmers, educators, relief workers, students and teachers, as well as Landcare and community coordinators. Issues included rural population decline, decreasing rice and forestry production, and the significant impacts of the 2011 earthquake and subsequent disaster at Fukushima. These communities had their own version of a landcare approach, adapted to their challenges, and were interested in collaborating and learning more. The tour group wondered how a landcare approach could come anywhere near helping in such situations. Australia’s challenges seemed relatively easy in comparison, and it gave us a new appreciation for current and future challenges we will all collectively experience in our changing world, as well as those currently facing Japan.

The group saw how Japan deals with the layering of persistent, massive, wicked problems that had never been seen anywhere in the world. They saw detailed responses, from major national approaches through to personal responses. They visited concrete tsunami-protection structures whose size and design concerned both the landcare-minded visitors

and local community members. They saw people surviving and thriving through both rural decline and destruction of agricultural, ecological, social, infrastructure and industry assets. They saw amazing resilience in the people they met – local community members who were picking up the pieces and getting on with life after tremendous losses. They wondered and argued about what might be possible using a landcare approach to assist in such circumstances.

The following model needs to be able to contribute in such extreme circumstances. It must also fit with local and global systems and infrastructures and be well supported. Would we overload landcare by adding such layers of complexity, or is this simply landcare's core business?

Critical elements in a model for landcare for everyone and everywhere

Landcare is all about local people organising themselves to learn, think, plan, work, socialise and act to care for their local environment, resources, farms and enterprises, and community. The critical element for landcare as a model is a network that would include most of these shared characteristics:

- bringing people from a social or geographic area together to create a happy, learning and sharing space and responding to shared needs
- having regard for Indigenous knowledge and ways of being and sharing
- learning from and with nature, to protect and conserve biodiversity as the critical structure within which to farm, live and learn
- using plain language, but inviting technical and professional knowledge to assist with learning, which helps everyone to be ecologically and land literate
- seeking and encouraging partners – business, government, researchers, schools and non-government organisations – to join and helping them be more effective
- building networks that are living 'labs' – local sites for 'learning and building stuff' for innovation and ingenuity, experimentation and acceptance
- being multidimensional (as compared to single issue) in focus (although they often start with a single issue and grow from there)
- being self-reflexive and looking at what people are doing as a group and as members, and in connection with the land and other species
- being strongly self-directed and self-reliant, with local governance and diversity (ages and backgrounds)
- experimenting – members learning by doing, in safe, supported environments.

As researcher Jim Woodhill (1998) found, Landcare groups 'emerge and grow naturally' and are 'flexible and adaptable to local situations'.

The landcare model – summary of common features

This potential model for Landcare groups and networks has a set of principles and practices that Landcare groups might share and that could be relevant across the world. These features include:

- forming a core group of local volunteers
- developing friendships and partnerships with others to share knowledge that helps everyone to care for the land and water, and for environmental and community resources

- working as a group on projects on public or private land
- looking after your own place, family and enterprise, within the context of being a part of dynamic catchments, environments and communities
- stepping up and collaborating after crises (like natural disasters and emergencies) and treating these as moments of great challenge, loss and disruption, followed by a need for innovation, localism, listening and rethinking how to move forward
- engendering trust within and outside the group
- reaching out and inviting in others to share knowledge, expertise and resources
- visiting other places to learn and share
- getting to know and documenting both the natural capital and social capital within your areas and groups
- keeping information and maps up to date and building local databases that hold social and project data
- running tours and site visits to other places and farms, including global visits such as farm stays, internships, etc.
- being nimble and non-hierarchical, with valued innovators and connectors
- continuing to talk to your neighbours (even if they aren't supportive)
- making friends and building partnerships and creating informal supportive networks (for example, with industry and government agencies, businesses and scientists) to collaborate and share knowledge
- being tech-savvy and highly networked, able to show and tell what you achieve through mapping, reporting, documenting and evaluating
- experimenting with new ideas, often by using a continual adaptive change process to reflect and adapt and change as needed
- recognising the planetary boundaries and their part in reducing and adapting to climate change impacts
- building the natural or 'green infrastructures' for global socioecological futures by being productive farmers and natural resource managers
- appealing to all ages and backgrounds, and having specific succession plans for young people
- respecting the wisdom of elders and the innocence, energy and passion of the young
- sharing knowledge in person and online, in traditional and dynamic and social forums and proudly promoting your activity and inviting others to join in
- often starting with a shed, schoolyard, bushland, coastal or farm meeting and social gathering and working from there to more complex projects
- following what matters and asking what people are going through, to determine the next group priority
- constantly looking forward
- doing things that are not always for your own benefit and having a sense of a greater good and giving people a sense of purpose within community and place
- being artistic and theatrical, to engage the community and others over the long term through engaging and sustaining social methods
- being partners, not simply clients, in extension models and knowledge transfer from those 'in the know'
- having fun gatherings that inspire and deliver on the human need for belonging, and instil a sense of purpose, place and importance in our world.

In the future, Landcare groups can create successful grassroots community networked responses to climate change impacts. They can become a perfectly placed network in local areas of skilled, aware and connected people who know their landscapes and networks. They can assist with preparation, recovery and other self-reliance and resilience needs in a world facing severe climate change impacts on local communities and enterprises.

Conclusion

This chapter helps capture the meaning and significance of landcare for a global audience. It has aimed to help find the shareable message and model of landcare and its approaches, and translate that for anyone, anywhere to take to their own communities. It provides guidance on a global network that locals anywhere can connect to and use to search for ideas, knowledge and people who can advise and support.

The next step is to trial, circulate and debate this list – pull it apart and transform it into a useful and evolving model. Landcare needs to connect into the global resilience and self-reliance models that would fit landcare so naturally and easily. It also needs to (and can easily) connect with the Japanese model of socioecological and productive landscapes, and other sustainability programs and goals. Landcare can be a grassroots answer to achieving such global goals and program outcomes.

A simple online search using the search keywords 'Landcare Scholarly Papers' reveals 81,100 accessible papers. That is a staggering amount of shared knowledge, but that's not all there is. Those papers and publications don't include the many thousands of landcare projects designed, coordinated, completed and invested in by the community across Australia and elsewhere. These have also been reported on. There are many thousands of additional reports sitting in paper archives, held by the originating Landcare groups, who would be happy and proud to share both their successes and failures. Landcare has achieved a substantial and valuable body of highly creative work, experiences and examples, with much of it accessible, and yet more needing to be made accessible. The plain language, the transferable language and writings about landcare are a bit harder to find and use. But we must try.

The experience and amassed data of the landcare experience is much studied, mapped, analysed and surveyed, but the results of such works are fundamentally missing from the practice and records of major global programs and platforms and the language of the sustainability, environment, food security, emergency and natural disaster recovery, and community development fields. That can be remedied, as all those fields are natural fits for landcare. Landcare is both a builder and a provider of 'green infrastructure' and the local response and eco-literacy that all life depends on. This chapter provides some pointers, but recommends an easily accessible, universally available, online, landcare-specific database as a great addition to the global landcare academy. We need to share, through a range of methods, that knowledge about how to 'learn and build stuff' in the landcare labs (the farms and shared spaces) of the world. That is something practical that could come out of this book.

Landcare has created a popular model for voluntary, local, resilience-focused and partnership-fuelled action. We must share our 'good thing'. Landcare has inspired a whole nation. Around 6,000 community Landcare and Coastcare groups can be found working regularly and actively in local landscapes, building both community and natural values and assets, and improving social and agroecological landscapes. Hundreds of projects have been inspired by the Australian landcare model in over 20 nations around the world.

An immense amount of work, commitment, investment and personal blood, sweat and tears has been invested as landcare has been taken up by communities in other nations. The landcare journey has been one of fits and starts, of highs and lows, of successes and failures, but the journey has ultimately been made successful by the persistent inspiration drawn from the achievements and approaches of Landcare people, despite the setbacks and challenges. The time is right to distil what landcare is in plain and shareable language. This is needed, as landcare offers a model for communities and people anywhere and everywhere, to implement responses and adaptations to the critically important climate change impacts and other problems that are eating away at our other planetary boundaries. Come join us.

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CHAPTER 26

Behind Landcare's success: sound management at state and national levels

Rob Youl



Abstract

Today in Australia, some 5,000 to 6,000 Landcare groups operate nationwide and many have formed into networks to better use regional resources. In Australia, Landcare's major motivations are community action on environmental restoration with a multidisciplinary approach. The movement supports sustainability projects and provides advice to all spheres of government. It delivers training at many levels, covering coordinators and community. It supports the on-ground management of numerous public reserves, citizen science, environmental education for schools and the public, and, increasingly, post-disaster rehabilitation within communities affected by cyclones, floods and wildfire. Perhaps unusually, although many government policies have been drafted, there is no formal set of rules and the definition of landcare remains open-ended. This has ensured great flexibility in Landcare's operations, although sustaining and growing this broad charter requires much unrecognised effort behind the scenes.

This chapter lists the many key supporting elements (or ingredients for success) that have evolved in Australia. Other countries initiating landcare will probably need similar provisions. Firstly, Landcare requires excellent internal communications, readily achieved via the internet. It also demands specialised support from governments and targeted budget allocations that cover community projects and contribute towards group and network overheads. Having been involved in Landcare since its inception, I briefly discuss these managerial elements from the Australian standpoint. I am also interested in online training and helping Landcare's international spread. As a forester for 55 years, I have promoted major multi-network revegetation projects, especially across state boundaries. Crossing state and national boundaries will be important to continue growing the landcare concept.

Introduction

Landcare started in Australia some 35 years ago when a group was launched at Winjallock in northern Victoria in November 1986. This was part of a statewide initiative of the Minister for Conservation, Forests and Lands, Joan Kirner. Kirner's background included promoting community support for schools through parents' groups, so she understood the key concept of subsidiarity, and she was determined to build an environmental program to involve people, initially farmers, in land restoration projects. Recognising the diverse but complementary skills (soil conservation, salinity research, weed and pest animal control and private forestry) that existed within the land protection sector serviced by her vast, newly created and integrated department, she enlisted a small team of skilled public servants to draft plans (Poussard 2006). The team also came up with the very useful term 'Land Care'. Before this, there was no brief, catchy or credible term in English for a holistic approach to land management.

Today, some 5,000 to 6,000 Landcare groups operate nationwide in Australia. Many have since coalesced into regional networks to better use regional resources and to undertake large-scale projects. In Australia, Landcare's major functions are community action on environmental restoration, with a multidisciplinary approach from neighbourhood to national levels. The movement drives sustainability projects (especially among farmers), provides advice to all spheres of government and organises training at many levels covering coordinators and the community. The movement guides on-ground management of numerous public conservation reserves, waterways and coastlines, and participates in citizen science (such as Waterwatch programs), environmental education for schools and the public, and, increasingly, post-disaster rehabilitation within communities affected by cyclones, floods and wildfire.

There is no formal set of rules, and the definition of landcare is open-ended. Indeed, the concept is so flexible that there are rural, urban, peri-urban, coastal, marine, Indigenous, youth, schools and sector-based Landcare groups.

Leading networks largely operate as community enterprises, deriving income from service and sometimes labour provision, diverse fundraising and even voluntary levies. They are also canny at spotting underutilised resources that can be directed to appropriate landcare activities. Perhaps unusually, however, there is no formal set of rules, and the definition of landcare is open-ended (Youl 2006). Indeed, the concept is so flexible that there are rural, urban, peri-urban, coastal, marine, Indigenous, youth, schools and sector-based Landcare groups. Moreover, Landcare members are very alert to new ideas, which they can often adopt quickly. Policy documents and formal detailed plans, however, are frequently drafted to assist government budgeting, accountability for external fundraising and program management.

Key features of Landcare's success

Not unexpectedly, such a broad charter requires much planning and maintenance effort behind the scenes. This paper lists most of the key infrastructural or support elements that have evolved in Australia. Other countries initiating landcare may well need similar provisions. These key institutional elements include targeted publicity, non-government fundraising (from corporate, philanthropic and community sources, including crowdsourcing), political lobbying, liaison and direct collaboration with all spheres of government. Administrative workloads are driven by insurance, accounting and audits, performance monitoring, legal support for incorporation, and logo and signage development. Miscellaneous landcare concerns include appointing official and celebrity patrons, fostering and supporting revegetation contractors and nurseries (often slanted towards indigenous trees, shrubs and grasses), coordinating volunteers and projects, ensuring safe working conditions, spreading the word overseas, ensuring involvement of ethnic and Indigenous communities, presenting awards and honours to recognise and thank outstanding groups and individuals, and forging links with artists, musicians, writers and poets.

Not yet achieved, but highly desirable, would be policies or systems of modest environmental payments to landowners who help the broader community by protecting biodiversity, sequestering carbon, restoring landscapes and maintaining catchment values. The delivery of public goods from private land, and rewarding landholders for the provisions of such goods over and above a reasonable duty of care, remains one of the most tantalising and challenging public policy challenges in natural resource management (NRM) in Australia.

All this complex effort needs excellent internal communications, readily achieved today via the internet and various social media channels, especially Facebook, YouTube and Twitter. It also demands specialised support from government departments (not conventional 'leadership' or domination, but shared goals, understanding, collaboration and guidance), realistic budget allocations covering community projects, contributions towards group and network overheads, and formal advisory committees where appropriate.

Advancing landcare

Coordinating volunteers

A crucial defining characteristic of landcare in Australia is voluntarism. Landcare group members give their valuable time freely, and landcare activities overwhelmingly depend on voluntary effort. This makes efficient use of scarce public funds and ensures community ownership of local activities. It also means that landcare does not lend itself to 'command and control' or top-down direction or prescription. Governments and other interests need to be prepared to work *with* the community, conforming to the grain of voluntary effort.

It is imperative to effectively and sensitively employ Landcare volunteers, of which there are perhaps three kinds. First, there are group and network members directly involved in Landcare. Second, there are members of the public who are attracted to specific projects and events. In both cases, volunteers must be treated well or they will evaporate. Events must be well run, safe, well catered for, fun, educational and welcoming. Pre-event and post-event publicity must be impeccable, with provision for insurance at appropriate levels throughout. Tools must be adequate and well maintained. Photographic appearances

must be confirmed and legal requirements for group support adhered to, including requisite police checks when working with children. The goal is for people to come back and help next time, with their friends. A bonus is that bringing city people to work on rural projects generates fellowship and lowers social barriers between the city and the country. I have been involved for 21 years in Hindmarsh Biolinks, a tree-planting weekend in the Victorian Wimmera district in which 150 or so Melbourne conservationists have annually participated.

Employees from companies are the third kind of volunteer. Some businesses pay networks to arrange landcare activities as team-building days for employees. This is a useful source of both funds and labour.

Landcare coordinators and facilitators

Landcare networks, and indeed many individual groups, employ coordinators, generally part-time, to manage planning, administration, grant applications, communications, safety, monitoring and extension advice. In Australia, coordinators are sometimes also known as facilitators, although this term is also applied often to individuals skilled in fostering consensus in community groups. Having paid staff to look after managerial detail often frees community (that is, volunteer members) from a demanding suite of administrative duties. This allows volunteers to concentrate on more practical, fruitful and rewarding projects in the field. Reducing the administrative load on volunteers has been a key to Landcare's success (Campbell and Siepen 1994).

Coordination offers interesting and worthwhile part-time and occasionally full-time jobs to a wide array of rural people, including young graduates and older women. Indeed, these experiences often provide a springboard to middle-level positions and beyond, and sometimes they direct individuals into research. Past appointments were generally based on skills, regional knowledge and personal abilities. However, land management qualifications are increasingly required (Andrea Mason, personal communication, 2017). The development of flexible vocational and degree courses in landcare would be desirable.

Given the importance and number of paid coordinators, workplace disputes will occasionally occur. In the future, the National Landcare Network is likely to make provision for some sort of tribunal to deal with employment issues.

Specialised support from government departments

In many ways landcare is a manifestation of 21st century public service management: less technocratic, bundling disciplines to reduce direct government involvement in technical extension, streamlining the provision of government grants, and increasing community responsibility by devolving decision-making and works supervision.

This has proven generally advantageous, although Landcare has from time to time been taken for granted, possibly because it has been so reliable and docile, concentrating as it does on on-ground results at local and regional levels. This has led to the recent emergence of the National Landcare Network and its state satellites.

This all needs a judicious approach by Landcare and the state, ideally resulting in bipartisan government support. Governments and ministers who support Landcare do need public recognition too, but they should not seek to dominate or direct community decision-making.

Internal communications

Most Landcare groups and networks have websites, social media platforms and even online administration and fundraising systems, enabling invaluable external and internal communications. These include regular newsletters, readily achieved via the internet and the various social media, especially Facebook, YouTube and Twitter. In addition, programs such as Survey Monkey can rapidly gather feedback from the community.

Publicity

The Australian Government set up Landcare Australia Limited in late 1989. Since then, Landcare Australia (as it is now known) has promoted many major community environmental events, assisted Landcare groups and networks develop projects, and helped with government initiatives. Landcare Australia has also been the leading promoter of landcare in Australia's media. A body with this sort of vital, creative and exciting charter must be flexible, collaborative and not egocentric. The landcare movement comes first! Arguably, a mix of land management professionals and experienced public relations, events and marketing specialists within Landcare Australia, with effective administrative support, has produced strong promotional results (Jennifer Quealy, personal communication, 2017). Interesting promotions have included the application of Landcare motifs on coins, postage stamps and reusable shopping bags. To better describe the ideal relationships sought, over time the use of the word 'sponsorship' has declined in favour of 'partnership'.

Non-government fundraising

While the Australian and state governments are by far the main fiscal contributors to Australian landcare, along with innumerable instances of useful municipal (direct and in-kind) support, Landcare Australia has over the last 28 years negotiated many partnerships with all kinds of funding sources. These have included corporate (especially national corporations), philanthropic and community funding, including crowdsourcing. As a project broker, Landcare Australia has often employed leverage to expand partnerships. Furthermore, by providing tax-deductibility for donations, it can also attract philanthropic and personal donations.

Insurance and legal support for incorporation and concomitant occupational health and safety action

Securing insurance and incorporation are essential activities because of the complexity and public nature of many Landcare programs, and the need to minimise individual liability. In Victoria, the Victorian Farm Trees and Landcare Association provided this support for some 30 years. It was recently subsumed into Landcare Victoria Incorporated, which took over this responsibility.

Accounting and audits

Thanks to the importance attached to landcare, many groups and networks have substantial annual budgets, sometimes worth over \$2 million. Consequently, they often must employ accountants and auditors. Occasionally these services are provided at reduced costs or pro bono. Community involvement in the management of these funds, however, goes a long way to ensuring probity.

Monitoring

The need for monitoring landcare effort is widely appreciated. However, in terms of transparency, fiscal and technical efficiency, public relations, community education and building cases for further government and corporate support, there is often no national uniformity. It is fair to say that Australian landcare could improve in this area. Drafting a national system for monitoring effort would be a useful academic project, and would encourage the emergence of more consultants or specialist teams. Monitoring is not just about probity; continuous learning can improve technical efficiency and promote and disseminate new technologies.

Supporting revegetation consultants, contractors and revegetation nurseries

Many Landcare groups undertake revegetation activities. Unlike countries with severely altered environments, in many parts of Australia, indigenous ecosystems continue to survive in relatively intact, although often fragmented, conditions. Hence revegetation generally aims at restoring and reconnecting these ecosystems, as far as is practicable. Larger-scale projects will often need commercial support, as voluntary effort will not suffice. After three or more decades of serious revegetation, Australia has a suite of experienced multidisciplinary consultants and a competent rehabilitation industry that sometimes also works on post-mining rehabilitation projects. Numerous local private and community nurseries and seedbanks provide great support, typically specialising in regionally indigenous trees, shrubs, wildflowers and wetland plants and ferns. Many nursery managers are superb sources of local knowledge.

Signage and logos, including usage for commercial purposes

Widespread recognition of landcare is highly desirable, hence the importance of the movement's logo, which must be deemed a huge success in the Australian context. Devised in the early 1990s by artist Cliff Burk for Landcare Australia, the now very familiar 'caring hands' symbol crystallises the spirit of the movement. Landcare Australia has simple and accessible rules for the use of this logo by groups, networks, programs and projects. At the same time, because the logo has commercial value when used by companies under licence to promote products and services, it has generated considerable income over the years.

Appointing official patrons and celebrity ambassadors

Involving notable and respected Australians can also increase broad awareness. Official patrons have mostly been governors. In Australia these are vice-regal appointments at national and state levels. Having a patron of this stature may help generate funds, but the biggest benefit has been their participation in award ceremonies. The use of celebrities, especially actors, musicians and sporting personalities, has also very positively promoted many landcare activities.

Ensuring the involvement of ethnic and Indigenous communities

Australian society is very multicultural. Accordingly, some rural Landcare groups and programs have made special provisions for participation by citizens of migrant origin. Much more obvious is the involvement in landcare (in all Australian states) of Indigenous Australians. Indeed, Landcare has stimulated reconciliation by educating non-Indigenous Australians in Aboriginal and Torres Strait Islander values and traditions, generating shared understanding and respect. Many Landcare projects employ Indigenous youth.

Awards and honours

Australia bestows biennial landcare awards, which are organised and well publicised by Landcare Australia, and have corporate and government support. Regional and state awards precede a national ceremony, with a dozen or so categories covering individuals, schools, groups, coastal and Indigenous projects, municipalities and businesses and more. This raises morale and recognises outstanding contributions and innovations, as do successful nominations for membership of the Order of Australia.

Forging links with artists, musicians, writers and poets

Connecting landcare with the national culture via dance, art, music, literature, food and theatre intensifies commitment to environmental restoration and personal satisfaction. In Australia, this has included concert tours, revues, painting exhibitions, poetry competitions, filmmaking, themed food festivals, outdoor sculptures and photography. Sometimes landcare is linked to major sporting events. Occasionally, religious services centre on people and the environment, ensuring an even wider reach of landcare concepts.

Political lobbying, liaison and direct collaboration with all spheres of government

As governments are subject to so many requests and demands, representing the needs of landcare in the contested arenas of national and state politics is important to ensure the movement's viability and reputation. In the last five years, state 'councils' (activist listening posts rather than bodies seeking authority) have emerged – most recently, the National Landcare Network, based in Canberra. These institutions take a big-picture view and coordinate diplomatic approaches to government by providing timely and unfiltered grassroots advice (Terry Hubbard and Kaye Rodden, personal communication, 2017). Victoria's forum is Landcare Victoria Incorporated, now a decade old. In a recent development, Parliament House in Canberra has a Friends of Landcare group for politicians and associates.

At regional levels, groups generally work productively with municipal governments, which sometimes house groups and networks and provide administrative support (accounting, payroll, printing and so on). At the same time, municipal governments can use Landcare staff and members and their knowledge to manage planning, pest and weed control, fire protection, open-space and ecosystem management, training and other day-to-day issues.

The other entities at regional level across Australia, although they vary in detail from state to state, are the 56 catchment management authorities, also known as regional NRM bodies. These are fostered and funded by government, and are charged with planning and coordinating regional effort and initiating and overseeing environmental projects in their chartered areas. Most, if not all, work closely with Landcare entities.

Academic aspects

The Nagoya Global Landcare conference in 2017 bore out the view that, in the main, academic research has been centred on social aspects of landcare. This has been helpful, with major contributions from Charles Sturt University in south-eastern Australia. The Nagoya conference also indicated that research directions today include overseas landcare, especially the unique approach evolving in the Philippines, and community education and training. Perhaps network development, post-disaster recovery and major project management and monitoring will attract the next wave of research workers (Mary Johnson,

personal communication, 2019). Furthermore, from experience in Mindanao, Mary Johnson and Evy Elago-Carusos cite landcare's capacity for bringing communities together after conflicts (Chapter 17).

Spreading the word overseas

Two small Australian organisations have worked in this arena: the Secretariat for International Landcare (for 23 years) and Australian Landcare International (for 13 years), covering some of the South Pacific, New Zealand, a dozen countries in Africa, the Philippines, the Indian subcontinent, Indonesia, Jamaica, St Kitts and Nevis, and North America. Although not directly connected with Australia's formal overseas aid program, both bodies have received government money to deliver landcare promotion and training activities internationally. Personal, philanthropic and Landcare group donations have also been important. Both the Secretariat for International Landcare and Australian Landcare have worked closely with Nairobi's World Agroforestry Center (ICRAF), which has, since 2004, maintained a small cell entitled Landcare International. The Australian Agroforestry Foundation, Otway Agroforestry Network and Beyond Subsistence have also collaborated with ICRAF to launch a Master Tree Grower training program in Africa. With considerable impetus from the Nagoya attendees, the Secretariat for International Landcare, Australian Landcare and ICRAF's Landcare International team amalgamated in 2019–20 to form Global Landcare.

Conclusion

Undoubtedly, a positive force such as Australian landcare will continue to evolve and grow. It seems likely that it will work more closely with emergency services to better manage planning for and recovery from disasters such as fires and floods. So far not achieved, but highly desirable, without blunting the value of group action, would be systems of environmental payments to individual rural landowners, helping the broader community by promoting more sustainable farming, protecting and increasing biodiversity (often by conserving endangered species, reconnecting scattered ecosystems, creating new habitat, buffering national parks, sequestering vegetative and soil carbon, restoring landscapes, enhancing rural recreation and maintaining catchment values to increase water supplies and improve quality).

Over the last 32 years, the Australian landcare movement has achieved many things. It has proved the virtue of the tenet 'Think globally, act locally'. It has enabled numerous communities to contribute to national environmental goals. It has been accessible and democratic, creative and trusting, non-discriminating, welcoming and personally rewarding. It has been more or less free of corruption, thanks to transparent administration and expenditure. It has promoted reconciliation between Indigenous Australians and the broad national community. It has enriched our social and intellectual lives and fostered an ever-deepening respect for our land and waters, their beauty, venerability, utility and fragility.

Landcare has also helped students to form their views on their environmental rights and future, and to work with the community to rehabilitate and restore. It has surely informed and motivated politicians many times, something that must be energetically sustained. Arguably, it has brought the community and the public service closer, and it has provided many talented people with a new and rewarding career.

Australians are keen to share these experiences with other countries.

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*Intrepid
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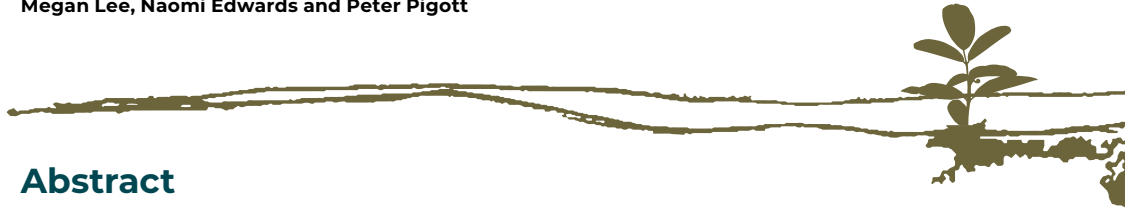


Photo: Peter Pigott

CHAPTER 27

Intrepid Way: an adventurous way forward

Megan Lee, Naomi Edwards and Peter Pigott



Abstract

Since its inception more than 30 years ago, landcare has grown to be one of Australia's largest grassroots environmental movements and is actively addressing some of the nation's greatest environmental and sustainability issues. For all its successes, landcare has been missing an effective community engagement strategy that targets young people and supports their development into adaptive, passionate leaders for the issues we face locally and globally. Intrepid Landcare was founded to address this missing link.

Intrepid Landcare is an innovative youth brand for Landcare that engages and empowers young people to act and lead on 'stuff that matters'. 'Stuff that matters' involves addressing issues young people are concerned about, such as marine debris, biodiversity decline, habitat loss and climate change. The Intrepid Landcare model supports young people to develop their skills, confidence, connection and knowledge to tackle these issues as a community. Intrepid Landcare has further inspired and supported the establishment of many youth-led networks, and projects being delivered by young people for young people.

This chapter explores the evolution of Intrepid Landcare and how taking risks and pushing boundaries, backed by evidence and passion, can build successful youth engagement initiatives.

Introduction

The idea of Intrepid Landcare was seeded in the Illawarra region of New South Wales, Australia, in 2009 by a local Landcare coordinator. Megan Lee, a young science and ecotourism graduate, grew up in the Illawarra, unaware that an established environmental movement existed right on her doorstep. It wasn't until Lee applied for a job as a local Landcare coordinator to support the landcare movement across the Illawarra that she became aware that there were more than 100 volunteer 'land care' groups working to restore the local environment. With her new role came a responsibility to inquire into how to best support this network.

In this inquiry, common concerns and questions expressed by the older generation who occupied most of the leadership roles were 'We need more young people!', 'Where are all the young people?' and 'How do we engage young people in Landcare?' It became apparent that Landcare lacked an effective youth engagement strategy that appreciated the changing citizenship role of young people. This was not only true in the Illawarra but across Australia, and beyond the institution of Landcare (Vromen and Collin 2010; Black et al. 2011; Maesepp 2012; Zuo et al., 2016; Walsh and Black 2018).

With a newfound appreciation of the power of citizen-driven initiatives, Lee set out to change the way young people were engaged and supported in Landcare. She decided to focus on creating meaningful co-designed opportunities, encouraging young people (late teens to 30-somethings) to appreciate the value of volunteering with Landcare. Lee's passion and sense of mission enabled her to push through an initial mix of resistance and rejection of her ideas from members of her local community. She established a local Landcare group for young people who had an interest in the environment and nature-based adventures and who were looking for social connection.

Illawarra Youth Landcare (now Illawarra Intrepid Landcare) was established in 2009 and set out to test assumptions that young people were lazy, not interested, and dismissive of the environment (Connell et al. 1999; Maesepp 2012). The average size of a Landcare group in the Illawarra at the time was four to six volunteers, so when 18 young people showed up on a Sunday morning to volunteer, these assumptions were challenged. The pilot project was a collaboration with a local Bushcare group, which had been restoring an iconic environmental and historical site near the city centre of Wollongong in the Illawarra. The idea was to bring young people together to assist a local group with an existing project. They could learn from experienced volunteers about environmental issues and land management techniques, and develop social connections with an older generation and their peers who shared a common interest. The experience would also include something recreational to encourage social connection. The idea was simple, yet attractive. Lee also took the opportunity to listen on a deeper level about what motivated young people to participate in short-term volunteering, and what it would take for them to become repeat volunteers.

This initial inquiry demonstrated that, while many young people brought diverse motivations, there was a common thread. They wanted to meet other young people who shared their values and interests, go on nature-based adventures and give something back to the environment and local community. The Zuo et al. (2016) study into people participating in nature-based activities in Australia grounds some of the assumptions and observations observed in the Illawarra group. This study found that, although young people generally have the lowest level of participation in environmental causes, they do

place an increasing value on the environment and have a higher likelihood of engaging with nature for recreational purposes, such as bushwalking. Interestingly, it also found that, of those reported as participating in environmental causes, 87% have a bachelor degree or postgraduate equivalent qualification.

Although young people generally have the lowest level of participation in environmental causes, they do place an increasing value on the environment and have a higher likelihood of engaging with nature for recreational purposes.

Volunteers drawn to Illawarra Intrepid Landcare have diverse backgrounds, including secondary school and university students pursuing arts, education, engineering and environmental studies. It also included young professionals in administration, government, teaching, marketing and media, bush regeneration, building trades and management. This diversity demonstrates that young people do place an increasing value on the environment and are increasingly interested in participating, regardless of their education backgrounds or careers. Illawarra Intrepid Landcare has partnered with over 90 conservation, Landcare and government organisations to co-design projects and share experiences, which speaks to young people's diverse motivations and backgrounds.

Anecdotal evidence and peer-review research into volunteer needs, wants, fears and frustrations support an understanding that young people seek environmental volunteerism opportunities for diverse reasons. Some of the most common reasons include the need for a safe space to 'connect', 'be yourself' and 'be part of a cause'. Social connections from volunteering provide a release from the sense of isolation experienced by those who struggle to establish a sense of belonging and purpose. Becoming part of a network enables them to access information and knowledge about conservation and environmental management, and interestingly, to align themselves with a type of action that isn't direct activism and campaign work. Others seek mentoring relationships with older and more experienced people to stretch their knowledge and understanding of conservation and the natural world, and build their employability in the environment industry. For more adventurous spirits, one driver is to have unique experiences, including meeting local leaders and gaining access to different landscapes and environments. For those in full-time work and study, the lure is to get outside, reduce stress and have fun with a sense of purpose and meaning. These elements of safety, belonging and purpose are identified by Coyle (2018) as a foundation for strong group culture that can provide both positive experiences and results.

Lesson in advancing your investment

Stepping out of fear into possibility

If not us, who? If not now, when?
John F. Kennedy, 1962

Establishing a group that inspired and empowered young people had many challenges. Lee, as a young person herself, contended with initial scepticism from peers and an older

generation within her immediate community. However, her drive for change, along with the encouragement, mentorship and support of Landcare Illawarra, helped support the development of a new group for young people.

After successfully establishing Illawarra Intrepid Landcare, Lee was contacted by Naomi Edwards, a young person from the Gold Coast, Queensland. Edwards's immediate focus was on succession in Landcare: to engage and build the capacity of those with passion and energy for the environment and sustainability to take on leadership roles within Landcare and broader natural resource management (NRM) and coastal management networks.

Lee and Edwards both recognised common factors that contributed to their capacity as leaders for the environment. Apart from both having naturally effervescent personalities, they had each had access to mentors, leadership courses and further education that developed their capacity to overcome fear and limiting beliefs. The ongoing support they received in their leadership development increased their self-awareness and confidence and provided a solid platform from where they could step up. Through their learning and practice, they had developed a relational and systems-based style of leadership practice, placing relationships and networks within their communities as central to collaborate and co-create projects (Lord et al. 2016). One question that they were interested in exploring was whether they could fast track this development in young people to enable them to build their leadership capacity to act and lead with Landcare.

Pilot for change: starting from where you are

Three key elements were credited with enabling and empowering the success of the landcare movement in its first decade:

- the bringing together of like-minded people
- the democratic and inclusive processes
- the will to do something about the enduring destruction to Australia's land and water resources (Lang 1998).

Voluntary participation in Landcare at the time was a 'testimony to the community's willingness to contribute to improved NRM and rehabilitation of degradation for the greater public good' (Lang 1998:15).

Lee and Edwards's enabling and empowering vision generated an idea to host a pilot – Leadership Retreat for Students – co-designed as a short, sharp, facilitated program to fast track youth leadership. Emerging young leaders would come together and be introduced to what is possible with Landcare, be supported in their leadership development and become empowered to do 'stuff that matters'. The first Leadership Retreat for Students was held on the Gold Coast in 2015. It was supported by a local Landcare network and a regional NRM group, Landcare Australia and local experts in conservation, food systems and community volunteering. The retreat offered an immersive journey for 12 local participants aged from 12 to 26 years to experience a range of Landcare projects. The focus was on self-awareness and team-building skills. This was coupled with encouragement, inspiration and support from local leaders to guide the participants as they identified their passions, which informed the design of a project they could lead.

The outcome was nothing short of inspiring. A group of secondary school students went back to their school and led a large-scale tree-planting project, engaging over

500 students and planting 2,000 trees. Others collaborated with community groups to facilitate waste-free workshops and carried out scaled-up marine debris clean-ups with scuba diving expeditions. Some of the participants have since transitioned into environmental-based tertiary education, gained employment in their chosen industry, moved interstate, volunteered overseas, established new networks and run their own sustainability social enterprises. The pilot retreat, a success that far exceeded expectations, was the catalyst to found Intrepid Landcare as a national organisation to drive a focused youth engagement agenda for Landcare.

Intrepid Landcare was established in 2015. It focuses on community development, leadership and personal development for young people who are passionate about the environment. The core objective of Intrepid Landcare is to support young people to do 'stuff that matters' for the environment, the community and themselves. 'Stuff that matters' can be a cause, project or interest that is important to them and makes a difference.

Leading from the inside out

Real leadership challenges in organisations seemed to require something different: Letting go of the past in order to connect with and learn from emerging possibilities (Scharmer and Kaufer 2013:20).

Young people face many barriers to their participation in community-building projects. Historically, youth engagement in Landcare has not been youth-centred, but instead has largely focused on organisational and group succession. Many efforts to involve young people have not recognised the depth and diversity of the contribution that they can make to Landcare, which also limits their participation. These strategies have not delivered the level of youth engagement that Landcare has sought.

Intrepid Landcare embraced this challenge by asking, 'What do we need to change and let go of in the current paradigm, and what new ways need to be embraced to create a thriving network that serves the needs of young people and communities?'

Firstly, Intrepid Landcare applied a wise practice for youth engagement and group development processes, and integrated human-centred design principles to build an effective network that could sustain the cause. This work involved developing systems that could critically reflect on current practice, what worked and what could be done better, look at the changing attitudes of young people, and explore practices that could adapt as needs changed.

Next, Intrepid Landcare sought a leadership team that could build a positive and collaborative culture from the onset. This team brought together diverse, experienced, passionate and self-aware young people who shared a desire to develop authentic relationships with each other, communities, partners and networks. The team initially came together as a reflexive group of leaders to set a clear purpose and direction based on shared values and a genuine passion for the environment and community. This work informed a culture based on trust, connection, accountability, openness, authenticity, integrity and having fun. The team valued the importance of culture building for organisations, especially in social movements (Martins and Terblanche 2003). Culture influences all aspects of organisations. For Intrepid Landcare, culture impacted the design and delivery of programs and services, and flowed through to the experiences of young people.

The following leadership and organisational development models have had a significant influence on the Intrepid Landcare model for youth engagement:

- Bass and Avolio's four components of transformational leadership and the 'Full Range Leadership Model' encourages commitment and fosters change (Bass and Avolio 1993:112; Bass 1996:5).
- Creating spaces that offer psychological safety for teams enables a level of risk-taking, speaking your mind and creativity, which strengthens the ability of the group to respond to complex challenges (Delizonna 2017).
- In his book *The culture code*, Danny Coyle (2017) writes that organisations that have demonstrated a strong and positive culture send clear, simple signals about connection and sharing risk, which builds culture. Intrepid Landcare's culture building exercises respond to the need for simple, clear signals about safety, shared risk and direction. The practice Coyle refers to is a key team-building process of Intrepid Landcare's systems.
- Research into how leaders with highly developed meaning-making systems design and engage in sustainability initiatives suggests that the presence of factors such as the ability to think strategically, collaborate more, seek out feedback, resolve conflicts and make efforts to develop subordinates increases success in redefining challenges to capitalise on connections (Joiner and Josephs 2007).
- Lencioni's 'Five dysfunctions of a team' model points out that when there is a safe level of conflict within the team, this strengthens accountability to deliver outcomes. By embedding this model in practice, the leadership team and local groups can engage in productive conflict, knowing that the purpose is to produce the best possible solution. The benefit is discussing and resolving issues more quickly and completely, and to emerge from heated debates with no residual feelings or collateral damage, but with an eagerness and readiness to take on the next important issue (Lencioni 2002:202–203).

The Intrepid Landcare leadership team established agreements that would enable ideas to be shared and practices to be questioned, and allow them to move through conflict and become aligned with purpose and focus. For instance, this founding leadership team was able to bring their 'whole selves' to this work. This practice of authenticity enabled honest communication free from unhealthy ego and judgement, and supported individuals to let go of limiting beliefs or getting caught up in gossip or the drama of stories. This work is an ongoing practice, which is important for new leaders as they step up into the leadership team. Personal development and wellbeing practices such as mindfulness, coaching, peer support, mentoring and further education are also ongoingly encouraged and supported. The awareness, agreements, principles and practices enable an efficient and productive environment, which continues to be reflected in the people and local groups who make up the Intrepid Landcare community.

Underpinned by an informed culture, Intrepid Landcare sought a structure that would enable a degree of freedom and fluidity while still meeting governance requirements. Research on other not-for-profits and social enterprises pushing the status quo pointed to flatter structures and self-organising models where responsibilities were shared, encouraging collaboration, leadership and contributions from all team members. Leadership and responsibility is shared, and members on the core leadership team and in local groups are encouraged to contribute in ways that align with their passions and interests, and what they want to grow. Importantly, this enables contributors to opt out when alignment or capacity is not available. Skills, knowledge, wisdom, time and energy are shared to support the focus of getting stuff done in ways that reflect the intent and culture of Intrepid Landcare, its people and young people.

Intrepid Landcare as an incorporated association requires governance and structural requirements, including a constitution that gives the organisation legal standing and protection for committee members and staff. Intrepid Landcare's flat management system enables people to take on leadership responsibility in areas where they have energy, passion and interest.

Young people drive strategy and policy for the organisation to ensure Intrepid Landcare remains innovative and relevant. In fact, the founding leadership team designed a succession and diversity plan from the beginning, which continually engages new contributors.

By role modelling the organisational culture, contributors are exposed to key principles while a safe space is created to share perspectives. This approach to succession enables honest perspectives and on-ground feedback to be shared with intention, which further offers research insights and practitioner experience. Contributors are also encouraged to take on leadership roles within the organisation when they can, making participation accessible and on their terms. The 'contributor' approach acts as an incubator for the organisation while developing the leadership capacity of the contributors and broadening the Intrepid Landcare network.

Intrepid Landcare also embraces mentorship from people who have been active in the landcare movement for a substantial amount of time. Bass and Avolio (1993) suggest that good leaders understand and respect the past, regularly returning to it for inspiration and instruction and to identify what is still relevant and important. Developing mentor relationships allows Intrepid Landcare to access wisdom and knowledge about the broader principles of the landcare movement. It also provides opportunities to honour the past and those who have contributed. Interestingly, many of the mentors who have gravitated towards Intrepid Landcare have a deep sense of self, purpose, compassion and support. Their mentoring styles tend to embody the idea of empowering others and enabling successional leadership.

The culture that underpins Intrepid Landcare extends from the inside out. Intrepid Landcare is best understood as a thriving ecosystem where everyone is heard, valued and can have an impact. By embracing principles and practices from a diversity of social movement models, and by encouraging reflexivity, Intrepid Landcare has been able to sustain its passion and energy and remain relevant and innovative for youth engagement in landcare.

Intrepid Landcare is best understood as a thriving ecosystem where everyone is heard, valued and can have an impact.

Backing it up

A core focus of Intrepid Landcare has been understanding the implications of young people participating and leading in Landcare. Early research revealed that the top five barriers to young people getting involved in Landcare were (lack of) time, not knowing what opportunities were available, not feeling comfortable turning up to projects alone, not knowing anyone and not feeling invited. Intrepid Landcare has worked with its network of local groups and broader Landcare groups to understand these barriers and co-design solutions to make volunteering safe, inviting and accessible.

Getting the invitation right

Clearly there has been something missing in the invitation for young people and the way relationships are nurtured when they step into a volunteer experience. Intrepid Landcare has worked with communities and young people to develop and consider new ways of inviting and including volunteers in Landcare and understand what it takes to encourage and support people to turn up to local initiatives. This starts with being connected to the 'why' of important projects and initiatives, and having clear and effective communications and branding.

Timing things well

When it comes to on-the-ground projects that young people want to show up to and volunteer at, the 'no pressure' approach has proven appealing to busy youth and young adults who want to build purpose into their day-to-day lives, yet have limited time and competing priorities. Volunteer opportunities that require ongoing commitment and loyalty are seen as unappealing initially, and many young people have avoided or removed themselves from opportunities because they don't want to let people down.

Intrepid Landcare offers opportunities for young people to opt in and out as they please and to offer what they can, when they can. Intrepid Landcare always asks what they need to feel supported. For example, in the Illawarra group, this has allowed members to take on responsibilities that align with their 'time-of-life' focus. The younger, less settled volunteers are interested in sporadic, entry-level experiences, while those who are more stable in their lives and rooted in their community can take on more leadership roles. When looking at global trends of leadership and volunteerism for the environment, Landcare has much potential to support the life development of people at all stages of life. Intrepid Landcare does this particularly well by filling the gap between Junior Landcare and Landcare itself.

Intrepid Landcare is open to supporting young people at any stage of their development, making sure that there are opportunities for them to step in and up whenever they are ready (where an opportunity exists). Intrepid Landcare builds this readiness by developing young people's confidence, skills and awareness of what they can do, so they are ready when the time is right. Research by Chawla (1999) and Lakin and Mahoney (2006) highlight that when young people are nurtured and supported and have the freedom to express themselves through project design and self-autonomy, this can be a powerful tool for engagement and support.

Creating safe spaces and belonging

Intrepid Landcare designs, hosts and facilitates activities in a way that makes it safe for participants to experience their vulnerabilities. They feel supported and nourished in their learning journey, and have the space to listen, think, learn, talk and, ultimately, to choose. Zimmerman (1995, 2000) found that empowerment and sense of community can encourage a sense of belonging and the confidence to influence change.

Connecting and empowering

The work of Intrepid Landcare connects young people to networks and projects that already exist in their community and offers the possibility of new initiatives. Creating a safe space for young people naturally enables connection and encourages creativity. Through workshops and leadership retreats, the skills gained in ways of working together lead to empowerment and the establishment of a community of practice. Intergenerational

connection results in young people and communities collaborating and co-designing projects, which encourages more young people to participate. A key outcome of this approach is that it constructs a level of practice and reflexivity to nurture connection and empowerment that sustains participation.

Using failure as learning

Experience in working with emerging young leaders through Intrepid Landcare has also revealed that young people experience fear of failure. The demands on them to be role models for change and take on leadership roles can contribute to burnout. This is carefully considered and factored in when setting up expectations, to embed an understanding that it is okay to say no, to ask for help, or for things to turn out differently to how they were designed, and that we are all in practice as leaders.

Looking after ourselves and each other

Intrepid Landcare brings a focus to personal and group wellbeing to ensure young people manage their time and commitments effectively. This is vital so that young people can cope with the stress that can be associated with leadership, personal growth and transformational experiences. Setting goals and working as a community of leaders can support this in practice. Intrepid Landcare explores the balance between individual and collaborative pursuits, helping young people develop an understanding of when to go it alone and when to seek out others to collaborate with.

Building individual leadership

Leadership is a concept we often resist. It seems immodest, even self-aggrandizing, to think of ourselves as leaders. But if it is true that we are made for community, then leadership is everyone's vocation, and it can be an evasion to insist that it is not. When we live in the close-knit ecosystem called community, everyone follows and everyone leads (Palmer 1999:74).

Integrating a diversity of leadership styles, teachings, experience, research and practice, as well as unique facilitation styles and hosting processes, Intrepid Landcare has designed a suite of effective youth engagement programs. One overarching program is a leadership retreat that aims to support young people to reflect on their leadership style, identify ways to overcome limiting beliefs, and strengthen their capacity to lead on matters that are important to them. Similar to the initial Leadership Retreat for Students, young people are taken on an immersive experience, connecting them to like-minded peers and leaders in the broader community. These instant networks of collaborators, supporters and mentors and the relationships they form over a weekend become an important foundation. They are also introduced to a range of projects that exist in their community so their awareness of local opportunities increases, and they can seek inspiration from these established initiatives.

Young people are also introduced to diverse personal and community wellbeing practices, and project management and co-design tools they can integrate into their everyday lives. These aspects of the retreat combine well to reduce the risk of being overwhelmed when implementing new ideas and projects. The participants appreciate having a toolkit of new ways of looking after themselves and each other on their journey as leaders and practitioners. The retreats leave young people feeling skilled and empowered to create change. Many young people report shifts in their thinking, confidence and ability to 'do stuff'.

Before this retreat I was not feeling the best about the environment and generally uninspired. The positive-minded people gave me a sense that change is possible when you take the right steps and we are more powerful than we think! (retreat participant, 2016).

The Intrepid Landcare leadership retreat was a complete mind shift. Not only did I get to connect with like-minded and passionate people, it was really inspiring to hear the story of Intrepid Landcare and empowering to understand how I can contribute (retreat participant, 2016).

Before doing the Intrepid Landcare retreat, I wasn't sure how I could help the environment and I didn't know many people who had the same values as me. I now have so much more confidence and a great group of people to start projects with! (retreat participant, 2016).

Over 75% of young people who have participated in a leadership retreat say that it has changed their Landcare experience and their life. Over 80% of all participants say that it has impacted their engagement and leadership practice. Regional and metropolitan communities that Intrepid Landcare has worked with say such programs encourage cross-sectoral, cross-regional, intergenerational and cross-cultural collaborations. Participants value the purposeful support brought through mentorship, sponsorship and personal relationships. Young people are constantly sharing how happy they feel about being involved in Intrepid Landcare.

As the impact of these programs is evidenced in increasing youth engagement in Landcare, communities and Landcare groups genuinely seek a collaboration with Intrepid Landcare to support young people to take on leadership roles in their communities.

Connection – the heart of Intrepid Landcare

Intrepid Landcare values the diverse ecosystem that we are all a part of and places connection at the heart of all that it does. The work of Intrepid Landcare nurtures spaces for connection to self and purpose, to community and environment, to Australia's Indigenous cultures (and their continuing connection to place) and to what brings us sustenance and wellbeing. Also, as Landcare evolves into an international movement, Intrepid Landcare recognises the diverse combination of needs that exist within each community and landscape that it works in. When we are well and connected, we can understand more intimately what communities wish to respond to, and the needs and drivers that will lead to sustained action. While it is important to operate from a set of values centred around connection, Intrepid Landcare further recognises that every local group and community will explore and interpret what these values mean for their local context. Community-led grassroots action underpinned by collaboration and connection will look different in each community and this diversity should be encouraged and celebrated.

Evidence of the enabling conditions of connection, as outlined in this chapter, is frequently expressed as a sense of 'happiness' by individuals who are part of local groups and communities we collaborate with.

I feel happy, empowered, grateful and overall inspired to make change (retreat participant, 2018).

Young people looking for connection, fun and adventure value Intrepid Landcare as a place where they can be themselves, make meaningful connections, and have the freedom to express the ways in which they want to take action as a community.

Conclusion

As the world faces many challenges – socially, culturally, spiritually and environmentally – it can be easy for young people to sink into despair and become overwhelmed by the road ahead. It is equally easy for generations who have been part of a 30-year movement to feel a level of concern for what the future holds for the organisation and ethos they have invested in so solidly and believe so strongly in.

Recognising that strategies employed to engage young people by institutions and communities have not necessarily delivered the level of youth engagement that Landcare seeks to achieve, Intrepid Landcare offers an effective model. Intrepid Landcare has achieved this by essentially asking what we need to do to change, what we need to let go of in the current paradigm, and what new ways need to be embraced to serve the needs of communities and young people in a local context and more broadly. These are questions that any organisation or initiative can ask to discover or rediscover the purpose of their existence.

From little things, big things grow. The little ripple that was Intrepid Landcare is now becoming a wave.

In the case of Intrepid Landcare, this has involved being open to diverse thinking, doing the research, piloting systems and learning by doing. This approach has enabled Intrepid Landcare to become a trusted brand and a thriving ecosystem where everyone is heard, valued and has an impact. This approach has also enabled team members, contributors and volunteers to contribute in ways that support the ongoing development of youth engagement and acknowledge the changing attitudes of young people.

Intrepid Landcare has evolved into a collective of young people who are passionate and ready to step in and up and do stuff that matters. These young people have a diversity of values but share a collective vision for a just future. By bringing everyone along on the journey, the ecosystem that Intrepid Landcare has become can continue to embrace change.

From little things, big things grow. The little ripple that was Intrepid Landcare is now becoming a wave. Landcare as an environmental movement and international brand must be able to support change that is emerging and needed as new ideas, like Intrepid Landcare, are founded.

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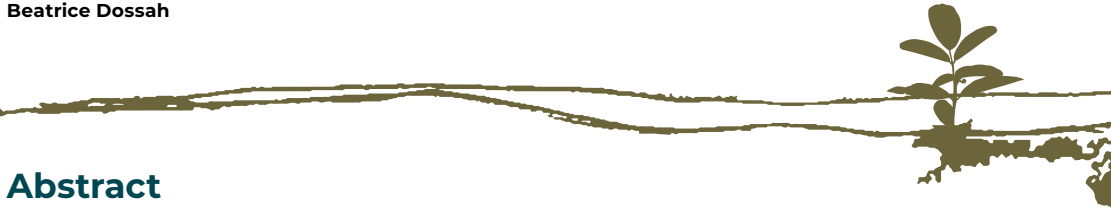


Photo: Hipsters of Nature

CHAPTER 28

Place-based education for sustainability: a strategy that promotes environmental awareness in Ghana through the arts

Beatrice Dossah



Abstract

The arts have the potential to empower young learners by helping them develop feelings towards nature and giving them a voice to actively participate in environmental protection and to take up leadership roles in their communities. Unfortunately, in the educational system of Ghana, the arts have not been explored significantly in the context of solving the low participation of students in environmental sustainability.

This chapter investigates how the arts can be used in the education curriculum in Ghana and elsewhere to empower all young learners to act for the environment. The research was planned in four steps.

- inquiring how young learners in Ghana learn about nature and whether the arts have been used as a medium to connect students to their local environment
- investigating how environmental arts education programs are conducted in Iceland, with the aim of adapting and transferring it to the Ghanaian context
- visiting events and spaces in Sweden and Iceland that have succeeded in blending arts and environment to help people connect to nature and develop positive attitudes towards their environment
- making recommendations for teachers, parents and policymakers on how to design environmental education programs that connect students to their real-life situations and empower them to act for their environment and livelihoods.

These lessons were also presented in the form of a hymn to nature.

Introduction

Four years ago, I launched Hipsters of Nature, a Ghanaian non-government organisation that uses innovative ways to reconnect youth to nature and encourage them to act against plastic pollution. Hipsters of Nature believes that the younger generation would do more for the environment if environmental issues were brought to them in a pedagogical and interesting way. Music, dance and fashion are part of everyday life in Ghana. Members of Hipsters of Nature are leveraging their artistic talent to educate people about plastic pollution and encourage positive behaviours towards the environment. The group frequently collaborates with a diverse community of artists, art festivals, schools, non-government organisations and eco-hotels to organise events that mix entertainment, educative workshops and concrete environmental actions such as beach cleaning. With the sponsorship of the GRÓ Land Restoration Training Programme under the auspices of the United Nations Educational, Scientific and Cultural Organization, I conducted a study on how the arts can contribute to making environmental education more attractive to younger people in Ghana and empower them to participate in environmental conservation. This chapter also provides an overview of my investigation of developing a pedagogy of environmental art education for young people.

The problem

Ghana's national environmental policy recognised several social issues that require action, such as low awareness, low participation and poor public attitudes towards the environment (Ministry of Environment, Science, Technology and Innovation n.d.). These challenges are described by Rademaekers (2011) as social issues, which artists rather than environmental scientists can solve. As an artist with a background in environmental science and community engagement, I was inspired to study how the arts can be combined with environmental topics to promote participation among young people. The objective of the study was to find solutions to the social problems reported in Ghana's national environmental policy by looking at the potential of the arts to involve learners in environmental protection.

The research was carried out with the following objectives:

- study educational initiatives in Iceland and Sweden that use the arts to promote environmental awareness and nature protection
- assess ways in which the arts can be used in Ghana to empower students locally in acting for the environment
- define recommendations for educators and ecologists who are designing environmental education programs for the youth.

To help set the context for this research, the next section of this chapter provides an overview of pedagogy research in environmental issues.

Education systems, environmental education and participation

Rodenburg (2019) reported that the current state of the education system worldwide is such that today's children are seldom sent outside the classroom to experience and explore their local environment. According to Sobel (1991), teachers prefer to use approaches that are convenient to them, such as using pictures in books to illustrate topics, because it saves

time and is simpler. As a result, children study issues that are separated from their local environment and real-life situations. Sobel reported that, consequently, what the children learn makes no sense to them (Sobel 1991). This is why Sobel suggests that an environmental education program should reflect the growing experiences of the learner.

Another researcher, Jónsdóttir (2017), pointed to the gap in addressing the lack of understanding of wellbeing in environmental education. According to Jónsdóttir, wellbeing is often mistaken for the acquisition of materialistic things. However, a healthy ecosystem, good education, equality, citizenship, conservation of resources, ethnic diversity and an empowered community contribute to the wellbeing of an individual (Jónsdóttir et al. 2014). Consequently, Jónsdóttir (2017) proposed that education should help students reconstruct their perception about what wellbeing is and help them reshape their values to live in harmony with nature and others. Supporting this statement, Rademaekers (2011) mentions that artists can use their work to help people reconstruct their relationship with nature by creating environmentally friendly products. Moreover, Miller argued that holistic learning should focus on all aspects of the development of a student: emotional, physical and psychological. A holistic education helps students to realise that they are part of nature and the local community (Miller n.d.).

Students and teachers who can establish the link between environmental issues and social issues are the best ambassadors to promote environmental sustainability and social wellbeing through their beliefs, attitudes and actions.

Place-based education and critical place-based education

Place-based education goes beyond the classroom. Learners are involved in community projects. What is more, place-based education reinhabits children into the natural world and closes the gap between classroom studies and the real-life situations of children, making learning meaningful to them (Smith 2017). Notwithstanding the merits of place-based education, Gruenewald endorsed a combination of this concept and another called critical pedagogy. Gruenewald supported this union because a critical pedagogy of place challenges educators by integrating cultural context and environmental politics into the focus of the place-based dialogue (Gruenewald 2003).

Critical pedagogy is mostly credited to a Brazilian educator, Paulo Freire. Freire emphasised that people behave in a certain way because of the influence of the conditions of a place and, in turn, they shape these places. Thinking about your behaviour means thinking about where you live, so responding to your situation is a result of human nature. Freire challenged students and teachers to examine and question the dominant powers that create inequalities among people in a place (Gruenewald 2003). Students and teachers who can establish the link between environmental issues and social issues are the best ambassadors to promote environmental sustainability and social wellbeing through their beliefs, attitudes and actions. When combined, critical pedagogy and place-based education result in a concept called critical place-based education (Gruenewald 2003).

Education and experience

Theories of critical place-based education also reflect those of educational philosopher John Dewey. Dewey stressed that experience is linked to the interaction between people, the environment and the materials they explore. Learning should be continuous because, when an individual moves from one situation to another, their environment broadens and what they have learned becomes an instrument to effectively manage subsequent events (Dewey 1986:247–248). According to Dewey's pedagogy, educators need to use new events or activities to relate to students' previous experiences, and it can be expected that the experience will expand in the future (Dewey 1986:245–247).

The potential of art in cultivating a love for place and nature

Rodenburg reported that educators often flood students with information on environmental issues without considering the interests of students in those issues. This can lead to students feeling helpless and less inspired to act (Rodenburg 2019). Subsequently, Eisner (2002) presented examples of the intellectual dimensions of art and credibly argued for making the arts fundamental in the teaching curriculum. The arguments put forward were that art:

- favours independent and personal judgement among young learners
- teaches young learners a variety of ways to resolve problems
- promotes discovery through student involvement in experiences that interact with their feelings
- promotes learning that involves flexible and dynamic problem-solving activities
- teaches learners to be aware of simple, small but unique effects of things
- empowers learners to communicate or express feelings in a variety of ways
- welcomes different perspectives of learners and teaches young learners to consider the views of others apart from their own
- teaches young learners to explore the sensitiveness of materials in their surroundings
- breaks barriers by allowing young learners to express themselves in ways that don't require the use of words, numbers or languages.

Transformative power of education for sustainability and tacit knowledge

Jónsdóttir stressed the need to involve learners in a practice called Education for Sustainability. Education for Sustainability raises awareness about issues of a place, and at the same time, recognises that their fundamental context, such as social, political, economic and environmental factors, are connected. Moreover, it engages students in problem-solving issues in their environment. Education for Sustainability also enhances student interaction with nature, as well as providing a learning platform through innovative activities. In addition, Jónsdóttir underlines an interesting aspect of the Education for Sustainability called tacit knowledge. Tacit knowledge can be defined as knowledge gained from personal experience, usually hidden, unwritten knowledge with no rules, and its discovery relies upon motivation (Jónsdóttir 2017). The onus is on educators to uncover this hidden knowledge among learners (Smith 2003).

Collaboration between artists, environmentalist, educators and the community

Inwood emphasises that a partnership between artists, teachers and their local communities can help to develop eco-artistic education that can challenge the power structure of education. For instance, British artist Andy Goldsworth and American artist Helen Mayer, among others, have used their creative artwork to highlight locally based and environmental issues, reaching a wide variety of audiences that scientists have not been able to before (Inwood 2007).

An educational music project called Biophilia, directed by musician Björk Gu-mundsdóttir in Iceland and other countries, relied on collaboration among artists and educators. Music, science, and technology were used simultaneously to explore creativity and learn more about nature. The project was developed for students between the ages of 10 and 12 years. It involves students using touch-screen pads to create music and experience the relationship between music, science and mathematics (Coleman 2014).

The activities of Hipsters of Nature in Ghana were reported by *BBC News* as another collaboration between artists and educators (Parkinson 2016). Somerville (2010) also emphasised the numerous advantages of storytelling, noting that the characteristics of storytelling, such as illustrations, performance, spoken word, among others, can be used to tell new stories to promote an invisible place.

Learning strategies for education, citizenship and sustainability

Kozak and Elliott (2014) suggested seven learning approaches to help educators and learners make connections between social, environmental and economic issues. This framework helps ensure that students become engaged and active citizens involved in achieving environmental, social and economic sustainability. The proposed framework includes:

- **Learn where the local community functions as a classroom.** With this kind of learning, young learners study problems within their local communities and are exposed to the culture of their local community. This translates into genuine knowledge for students and gives them opportunities to expand their knowledge outside the classroom.
- **Connecting students' real-life issues to learning.** This means involving students in activities they value.
- **Linking multiple branches of knowledge to learning.** This takes into account the various interests of the students and helps them understand the links between the subjects.
- **Take action on the knowledge acquired.** This takes students beyond identifying a problem to finding solutions.
- **Guided learning through student questions.** The teacher explores the questions asked by students by helping them answer them through group or one-on-one experiences. This encourages critical thinking and the capacity to solve problems.
- **Learning where the teacher acts as a facilitator and allows students to lead the way in learning.** This promotes democracy in schools and encourages students to become actively involved.
- **Learn where different opinions, positive or negative, are taken into consideration and analysed.** This teaches students to respect different points of view and provides more alternatives to problems (Kozak and Elliot 2014:6).

The role of gender in sustainability

A study was conducted in the eastern region of Ghana on how parents contribute to forming gender roles for boys and girls. The study showed that between the ages of 6 and 10 years, fathers were responsible for nurturing a male role for boys, usually outdoors. Mothers were responsible for nurturing girls in female roles, such as domestic chores, which usually take place in the home. Generally, girls are expected to spend more time at home, helping with domestic chores, or are required to come home early to help their mother with domestic chores, while the boys spend more time outdoors exploring (Boateng and Ampofo 2016). In light of this, gender impacts were taken into account in the research.

Data collection and analysis

Both quantitative and qualitative methods were used for data collection, ensuring multiple ways to explore the research problem. A quantitative survey was sent to 60 Grade 6 students in Amasaman in the Ga West municipality of Ghana. The students were sampled using a stratified method. The survey included the following questions:

- How and where do students learn about nature?
- Are the arts used as a medium for communication?

The survey included closed questions that resulted in numerical data that was analysed using statistics.

For the qualitative method, open-ended questions were posed to artists and art educators in Ghana and Iceland to better understand their approach to the use of art as a vehicle for environmental education. The artists were selected because of their methods of using the arts to increase public awareness of environmental and social issues. The interviews were recorded so that they could be reviewed to identify common patterns and themes. After conducting interviews with the Icelandic artists and educators, their answers led to open-ended questions that were sent online to three Ghanaian artists.

An observation of a music festival in Sweden was used to explore how such programs could help promote inclusion and connect people to their local environment. Backafestivalen is a local festival held annually in the small Swedish community of Simrisham (Backafestivalen 2017). The festival includes music, dance workshops, painting for children, rock climbing and camping in nature. Data were collected through conversations with festival organisers, artists, participants and personal observation.

Observation of the natural setting of the Vatnajökull National Park in Iceland was used to investigate how visits to protected natural places could help connect people to nature. The park offers beautiful landscapes made up of moving glaciers, geothermal activities, and volcanic eruptions (Vatnajökulsþjóðgarður n.d.). The national park has an educational program for children to learn about the ecosystems in the park. Online interviews with the park manager were used to collect the data.

In addition, observations of the Þórbergssetur Museum were used to study how visits to historic sites could help connect people to nature. The museum was constructed in honour of the author Þórbergur Þórjónsson in 2006. The exhibits in the museum show the life of the writer from childhood and a history of his native town in Iceland. The museum uses storytelling and exhibitions to inform tourists about the history, nature and the culture of the town (Þórbergssetur 2014). The data were used to conduct a thematic analysis by identifying common themes and patterns in participants' responses. The themes were based on the seven points proposed by Kozak and Elliott (2014).

Key findings

Quantitative data

About 61% of Grade 6 students reported learning about nature in their school more than once a week or many times a week. None of the students reported that they had never studied nature in school. The topic that most often included the study of nature was religious and moral education. Creative arts and the after-school program were the least selected by students. The findings showed that 83% of boys and 72% of girls learned about nature outside of school. The study revealed that 41% of the students received more information about nature from their mothers, and 39% received such information from their fathers. There was no significant difference between the response of boys and girls. More than half (51%) of the students felt best when they learned about Ghana. In addition, 36% of students sometimes used art to reflect on other topics and 15% of the students learned about nature from stories.

Qualitative data

Integrated learning

When interviewing the Icelandic interviewees, it was obvious that they all believed it was important for students to be able to integrate skills and knowledge of all subjects when creating art, as suggested by Kozak and Elliot (2014). For example, Curver Thoroddsen, an educator involved with the Biophilia project, stated:

The project aimed to teach music as well as science at the same time. It helps to be creative because many children lose focus after an hour. After five years, I found it interesting to teach kids the different topics at the same time. It breaks down the stuff into smaller units. It can also touch upon the teaching theory of many senses that we can be smart in brains and smart in how you move, music, creativity and many advances people can have.

Learning locally

All the artists said that it is important for teachers to undertake learning that takes advantage of settings in their local community, nature or outside the classroom, as suggested by Kozak and Elliot (2014). Helga Arnalds noted, 'Adults go for a hike on the mountain, camping and entertain themselves through nature. Kids are similar. They get to know nature through entertainment.' Helga Árnadóttir, park manager at Vatnajökull National Park in Iceland, supported this:

Children should have a change [chance] to experience these protected areas, learn about their uniqueness, and mostly, learn to value and respect their nature and history. I believe, that if children and grownups are given a change [chance] and interpretation, to experience the unspoiled nature, they will have a stronger sense of the area and hopefully, stronger will of nature and environmental protection.

One interviewee insisted on the importance of connecting with one's culture and local community:

Porbjörg Arnórsdóttir: I think it's important for everybody to locate himself in local culture and community and find themselves connected to the environment, their language and their homeland, to know your background, part of it is to enjoy some cultural things or art, like music, literature, painting and also communicate to it, enjoy it, be part of it and find out this is part of me, also nature these wonderful things around, enjoy the moments you have and so on ...

Real world connection and linking many branches of knowledge

Most of the respondents mentioned that it was necessary for teachers to connect learning to the real-life experiences of students, making learning meaningful to students as suggested by Kozak and Elliot (2014:7). Curver Thoroddsen, who was involved in the Biophilia project, said:

Because we used applications and iPads and they all looked weird, not like normal instruments like piano or guitar. When I was doing more of this kind of workshop for one week, on the first day, the kid is saying, 'I don't know how to make music', but they are saying, 'I can't play an instrument'. Everybody can make music if you use a different tool. Always on day 3 or 4 the kid is saying, 'I have done a lot of music and learned a lot about science'. The touch screen is tactile; it is about doing things with your hands.

Thoroddsen also emphasised how different branches of knowledge were linked in the Biophilia project.

When we were developing this programme [the Biophilia project], we were thinking that maybe something else comes or people use topics like maths and knitting or maths and painting.

Alternative perspectives and acting on learning

Most respondents noted that integrating different opinions and methods leads to critical thinking, as noted by Kozak and Elliot (2014:7). Thoroddsen noted, 'Paulo Friere pedagogy is about self-control. The people can follow their customs and say this is who we are, we [are] not going to change, maybe the classroom is not fitting our situation.' The respondents also highlighted the importance of acting on learning, as suggested by Kozak and Elliot (2014). Thoroddsen said, 'Three girls were empowered [to] start a band after the Biophilia project. Two guys also started a band.'

Inquiry and shared responsibility

The respondents highlighted that educators should give learners opportunities to find their own answers through investigations, as suggested by Kozak and Elliot (2014:7). Arnalds, an environmental educator in Iceland, stated, 'Whatever the medium I would say listening, experimenting, approaching with an open mind, the mind of a beginner is the best way to learn and also to create.' The respondents in Iceland also talked about learning that involves shared responsibilities between students and teachers, as suggested by Kozak and Elliot (2014). Arnalds stated, 'Together we are finding out about our surroundings. They are also teaching me a lot.'

Observation of Backafestivalen

Backafestivalen festival coordinator, Hanna Hanan Thorstensen, said that Simrisham is one of Sweden's municipalities that has welcomed refugees from countries like Syria, Somalia, Iraq and Afghanistan. Thorstensen said that one of the festival's goals was to integrate immigrants into the community by encouraging them to participate. Employment opportunities were offered to some refugees to cook food for the festival team. The festival ensured equal representation of female and male artists. Thorstensen said that opportunities were given to local people who were unable to afford the gate fee to volunteer at the festival for free entry. The researcher observed that waste containers on the festival site were labelled to separate glass, paper, bottles and organic waste. The festival's food vendors served food on paper plates. At the end of the festival, the organisers ensured that the festival site was tidy and left in its original state.

Ghanaian artists

All the Ghanaian artists said that the arts can be used to promote awareness about environmental issues in society.

Rufai Zakari ... as much as we are all very concern [concerned] about the environment, we should think of product that are damaging the environment which is hard to do away with in our daily life. The only way to overcome this problem is to re-use them artistically [artistically] and has to be sensible in a way to impact society.

All the Ghanaian artists said that they could contribute their artistic skills if a festival was organised in Ghana to promote environmental awareness. Zakari stated, 'My contribution will [be] based on using creative thoughts to address and create beauty out of trash in order to give them another chance to live.' One artist stressed the importance of including traditional and cultural heritage in such a festival. Ackweh stated that, 'Drums and musical instruments can be used and fun songs can be composed and taught to the audience.' All the Ghanaian artists supported an approach where artists give space for viewers to participate in their work. Ackweh said, 'It is a powerful way to experience art today. Having the audience play a part of the project leaves most lasting memories of the experience and the communication is better.'

The lessons from this research are presented in a song called 'Connect to nature' that has been circulated on YouTube (Dossah 2018) to reach a wider audience.

All the Ghanaian artists supported an approach where artists give space for viewers to participate in their work.

Discussion on key findings

The findings showed that there are good structures in place for environmental education development in Ghana. Ghana already has an environmental education policy. Boys learn about nature outside the school more than girls do. This could be because boys spend more time outside their homes playing, unlike girls who have to help their mothers with domestic chores at home (Boateng and Ampofo 2016). These results show that there is potential for students to learn about environmental issues outside their classrooms, perhaps when schools collaborate with parents and the community (Kozak and Elliot 2014). Teachers could enhance learning about nature outside classrooms by equally engaging both boys and girls in projects within their local communities (Kozak and Elliot 2014; Inwood 2007).

It was good to see that some students mentioned that they learn about nature from stories. Storytelling could be used in environmental education, perhaps by using stories of students or local communities to bring a spotlight on these places (Somerville 2010). These stories could be followed up with investigations by students in the community (Kozak and Elliot 2014). More than half (51%) of the students mentioned that they feel best when they learn about Ghana.

These results show that there is potential for using local environmental issues as examples in learning, perhaps by delegating students to investigate the issues (Kozak and Elliot 2014). There is also potential for students to reflect on issues through a range of the artforms, as a way of discovering different perspectives on environmental issues (Eisner 2002; Kozak and Elliot 2014).

Empowering teachers

Teacher empowerment is required to successfully implement environmental education. It is important to involve teachers in the design of the environmental education program so that they see themselves as part of the change. Teachers can draw on their rich experience of intellectual development that can be enriched and multiplied by artists (Inwood 2007).

Festivals

A festival like Backafestivalen could be organised in Ghana to promote inclusiveness and connect students to their local environment. It could take place in a botanical garden where students can interact with the surroundings of the garden. Students may be motivated to use tacit knowledge to solve problems (Jónsdóttir 2017). The festival could integrate cultural aspects of Ghana, such as storytelling, drumming and dancing, to make the activities relevant to the participants (Gruenewald 2003). Educators could use such festivals to unearth the tacit knowledge of students through hands-on activities (Smith 2003).

Interviews with Ghanaian artists

The Ghanaian artists interviewed were receptive to working with people, so there could be a collaboration between teachers, students and artists in environmental education. Zakari said he uses trash to create useful and aesthetic works of art. A similar activity could help students think about their daily consumption behaviour at home and school and translate into significant learnings (Kozak and Elliot 2014). Thoroddsen stressed the importance of building bridges between subjects by teaching multiple subjects together. This could help students understand the relationships between social, economic and environmental issues (Smith and Sobel 2010).

Holistic curriculums

A holistic education helps students to realise that they are part of nature and the local community (Miller n.d.). One interviewee, Árnadóttir, said that when students have the opportunity to visit protected areas such as a national park, they become connected to nature and feel inspired to protect it.

Ethical issues

Braun and Clarke noted that researchers can influence certain aspects of the study because of their values and cultural environment. Subjectivity could not be avoided in the study due to the difference in the researcher's culture and possibly her background as an environmental scientist. However, the researcher was respectful of the views presented by all the interviewees. During the investigation and interviews, certain codes and ethical requirements were respected. For example, during the school survey, students were asked not to write their names because of confidentiality concerns (Braun and Clarke 2013). A letter was sent to the principals of the schools with attached questionnaires to seek permission to interview students from the school.

Conclusion

The results of this study inform a developing pedagogy for environmental art education young learners. Both the Icelanders and Ghanaian experts interviewed highlighted examples of learning methods that can create engaged learners and make learning meaningful for students. Learning strategies must be combined to achieve a holistic education and it is important not to forget about teachers, as they play a vital role in promoting good values in students and encouraging them to actively participate in environmental conservation. To achieve this change, teachers need to become learners themselves and be open to innovative learning methods. Further studies could consider the opinions of teachers and the challenges they face so that they can feel part of the process.

From this research, I hope that ecologists will increasingly partner with schools, educators, artists and community groups to empower future generations to participate in environmental stewardship. Additionally, I hope that this study will inspire landcare initiatives globally to combine the arts and the different pedagogy methods in ensuring holistic learning for the future generations.

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