



SUSTAINING EDUCATIONAL COMMUNITIES

An International Specialised Skills Institute Fellowship

TOM LINNELL

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Bishop O'Dowd High School
A Catholic College Preparatory School

*Finding God
in All Things*



Academy
FOR Global
Citizenship



SACRED HEART SCHOOLS

ATHERTON

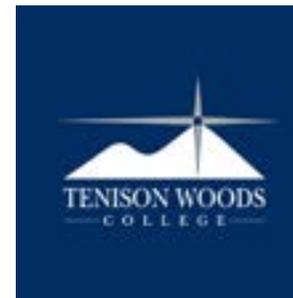


The Brooklyn
New School

**BROOKLYN
GRANGE**



PLANT
CHICAGO



TENISON WOODS
COLLEGE



Table of Contents

1. Acknowledgements	1
2. Executive Summary	3
3. Fellowship Background	5
4. Fellowship Learnings	9
5. Personal, Professional and Sectoral Impact	21
6. Recommendations	22
7. References	24
8. Appendices	25

1. Acknowledgements

The Fellow would like to thank the following individuals and organisations who generously gave their time and their expertise to assist, advise and guide them throughout their George Alexander Foundation Fellowship.

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The ISS Institute plays a pivotal role in creating value and opportunity, encouraging new thinking and early adoption of ideas and practice by investing in individuals.

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The Fellow sincerely thanks The George Alexander Foundation for providing funding support for the ISS Institute and for this Fellowship. In 1972, George Alexander AM (1910 - 2008) set up an independent philanthropic Foundation as a way of sharing his wealth and giving back to the community. Today, the main focus of The George Alexander Foundation is access to education for promising young people, particularly students with financial need and those from rural and remote areas.

The George Alexander Foundation (GAF) Scholarship and Fellowship Programs form the core of the foundation's work, operating in partnership with major tertiary institutions, while our Fellowships and other Education grants provide a variety of other unique and challenging educational experiences. George Alexander believed in the notion of 'planting seeds and hoping they grow into pretty big trees'. The programs supported by the Foundation endeavour to support this ideal and as GAF students graduate and go on to contribute to the community, George's legacy and spirit lives on through their achievements. George Alexander came to Australia as a child migrant, and went on to become a mechanic, an entrepreneur and a businessman and later, a generous philanthropist, who held that you do not own the possessions you have, 'you're just minding them'. This philosophy guided him to 'give' during his lifetime and to hope that through his example, he might inspire others to do the same.

Tenison Woods College

Thank you to the staff and students of Tenison Woods College, for allowing space in your class, school and lives for important conversations about sustainability to take place. This was clearly witnessed at the 2019 Staff Reflection Day, where 200 staff shared a day of exploration for ecology and sustainability.

A particular thank you must be given to College Principal, David Mezinac, for his support prior to, during and following the Fellowship. This guidance has been a catalyst for my career in education and allowed for an opportunity of deep lifelong learning.

The Fellow would also like to acknowledge the assistance provided by Catholic Education South Australia in supporting this learning experience. Individual leaders in this supportive sector have provided a critical role in shaping and expanding the Fellows understanding in the space of sustainability, faith, education and community.

The Fellow would like to thank his wife and family for their undivided support leading up to, during and following the learning journey.

Lastly, the Fellow would like to thank the following schools and community groups where he was fortunate to spend time with a range of staff during his Fellowship across the United States of America;

- » Sacred Heart Schools Atherton, California
- » Bishop O'Dowd High School Oakland, California
- » Academy for Global Citizenship, Illinois
- » Brooklyn New School, New York
- » Harvard University, Massachusetts
- » Faith in Place, Illinois
- » Brooklyn Grange, New York
- » Farm on Ogden, Illinois
- » The Plant
- » Parson School of Design

2. Executive Summary

Tom Linnell is an educator with a passion for connecting young people to the big issues facing the world, building advocacy and agency in the process. Tom has been able to drive significant change in the space of sustainability within Tenison Woods College, a large regional Catholic school in Mount Gambier, where he is employed as the Sustainability Coordinator. Through this role, Tom has also been a catalyst for sustainable change within his local community and working strategically to implement ecological change across the 103 Catholic schools in South Australia.

Background

Education and sustainability may appear like a perfect match on paper. Both are committed to meet the needs of current and future members of society. Both are values-driven and major economic drivers across the globe and both aim to enhance the world we live in. However, explicit teaching about sustainability and its many themes are often taught haphazardly and inconsistently.

Tom Linnell is a sustainability educator who has been on a journey to investigate the best ways to reconnect young people, and the education system more broadly, with the challenges the planet is facing and to explore hope filled solutions student can be a part of. Having taught in a variety of setting and roles across Australia and North America, Tom currently teaches in a regional Catholic Early Years to Year 12 College as the Sustainability Coordinator. His varied professional life and continuous learning experiences have enabled him to continually question the changing role of education today, and its important role in a sustainable future.

In mid-2019, Tom undertook a learning journey to the United States of America, spending time with leading communities in the space of sustainability. The goal was to look at world renowned sustainable schools and community groups and their success in generating significant results and community engagement with relatively small groups of passionate people.



Image 1 - Student at Brooklyn New School investigating plants

The experience also aligned with a seven-week intensive Harvard University course, *Sustainable Leadership for the Twenty-First Century*. This prestigious course was one of the first of its kind around the world, challenging the thinking of those enrolled across all sectors; education, business, government, non-profit, church, and community. *Sustainable Leadership for the Twenty-First Century* aimed to inspire and enable people to lead effective change towards environmental sustainability and enhance individual change agency skills as applied to a variety of organisational contexts.

Fellowship learnings

Throughout the Fellow's time at Harvard University as a participant in the *Sustainable Leadership for the Twenty-First Century* course, the Fellow strengthened his understanding of a range of sustainability and management domains including (but not limited to);

- » Change Leadership – Working with teams and organisations to develop shared objectives and ownership of projects, knowledge, action and agency.
- » Organisational Management Structures – Awareness of and strategies for working in hierarchical and adaptive networks and best utilisation of both to enact change within the organisation.
- » The Psychology of Change – Developing an understanding of the human psyche's role in certain attitudes and behaviours relating to change and the ways that organisations and communities can implement successful long-term change projects.
- » Biomimicry – Biomimicry is when human design is modelled on certain aspects of organisms or nature in general. Biomimicry can be a useful tool in building awareness and eco-literacy in teams to drive and disseminate sustainable change.
- » Systems Thinking – Everything is connected to something else in system thinking and can have a positive or negative effect on a community. This is also true when looking at organisations and the many processes that they consist of.

Personal, professional and sectoral impact

The experience also challenged the Fellow personally, professionally, socially, and globally and enhanced his ability to lead change for sustainability within his community and beyond. The Fellowship has enabled Tom to forge lifelong sustainability-minded friends from around the world; he was surprised at how such powerful bonds were formed in such a short amount of time.

The Fellow has since presented his findings to a variety of settings and audiences including students, Church and community groups, school leaders across South Australia and sustainability and environmental networks in South Australia and Victoria. One such example of this was as a keynote speaker at the recent 2019 Glenelg Estuary and Discovery Bay Ramsar Site Annual Community Forum, presenting to the topic of 'Engaging Young People on the Natural World'.

Considerations and recommendations

This Fellowship report concludes with several practical findings for youth, families, educational and community groups and industry, focussed on engaging young people in nature and issues of sustainability. The findings shared have already been disseminated through several keynote presentations with audiences ranging from 15-150 people.



Image 2 - Student at Brooklyn New School tending to chickens

3. Fellowship Background

Fellowship context

The word sustainability has been used to discuss a vast array of contexts, becoming simply a buzz word to many. The term's use in the political arena and industrial realm, often as a leveraging tool to win votes, tenders or community buy-in, has left people confused by its true intended meaning. In its most simple form, sustainability is the ability for something to maintain or sustain itself for an infinite period. The Native Americans had a popular proverb; "We do not inherit the Earth from our ancestors, we borrow it from our children". The Australian Curriculum Assessment and Reporting Authority (ACARA) identified sustainability as a cross-curriculum priority in 2012, which it describes as "addressing the ongoing capacity of Earth to maintain all life". Bringing sustainability into education is not new or unique to an Australian context. Most Industrial Revolution vocations (and the varied educations that preceded them) required a strong connection with the land and the natural systems that governed them. It seems that for the past three hundred years, driven by the Industrial Revolution, most developed countries have simply lost touch with the natural world around them and education, to meet the demands of a growing workforce, has done the same.

In 1992, the Rio Earth Summit saw leaders from around the world convened to discuss the growing concern for the degradation of the planet. A blueprint titled 'Agenda 21' was devised, calling for actions to be taken on a local, national and global level by organisations of the United Nations System, Governments, and major industries in every area in which there are human impacts on the environment. One such chapter advocated for the "pivotal role of education in the achievement of sustainability".

Ten years from the Rio Earth Summit, at the 57th United Nations General Assembly in 2002, it was proclaimed that 2005-2014 would be marked as the UN Decade of Education for Sustainable Development, emphasising that "education is an indispensable element for achieving sustainable development". The major objective of the UN Decade of Education for Sustainable Development (DESD) was to "integrate the principles, values and practices of sustainable development into all aspects of education and learning".

During this decade, the Melbourne Declaration on Educational Goals for Young Australians (Ministerial Council on Education, December, 2008) called for Active and Informed Citizens to "work for the common good, in particular sustaining and improving natural and social environments". This powerful statement developed into what would eventually become one of the Australian Curriculum's three *Cross-curriculum Priorities*, stating it places an "emphasis on Sustainability as a priority for study that connects and relates relevant aspects of content across learning areas and subjects".

The Australian Curriculum goes on to state that the cross-curriculum areas of sustainability is fundamental to;

- » understanding the ways social, economic and environmental systems interact to support and maintain human life
- » appreciating and respecting the diversity of views and values that influence sustainable development
- » participating critically and acting creatively in determining more sustainable ways of living.

Most recently, 2015 saw the 2030 Agenda for Sustainable Development, which was adopted by all United Nations Member States to again provide a shared blueprint for peace and prosperity for people and the planet now, and into the future. Each of the 17 Sustainable Development Goals (SDGs) agreed upon sought an urgent call for action by all countries - developed and developing - in a global partnership for the environment. They recognise that “ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests”.

During the same year the SDG goals were ratified and disseminated at a global level, Pope Francis published an evocative encyclical, *Laudato Si* ('Praise be to you') - On the Care for Our Common Home. *Laudato Si* captures the interconnectedness of social, economic and environmental justice in building and protecting Our Common Home. It highlights the 'intimate relationship between the poor and the fragility of the planet'. Protecting the planet requires an integrated approach to combating poverty, restoring dignity to the excluded, and at the same time protecting nature. The Encyclical, comprised of six chapters of contemporary Catholic Theology and Anthropology, dedicates its final chapter to “Ecological Education and Spirituality”. In this chapter, Pope Francis expresses the importance of an ecological conversion, starting in our schools through connecting young people with all of Creation/nature and the role schools and education plays in this process.

“Good (*ecological*) education plants seeds when we are young, and these continue to bear fruit throughout life”. (Pope Francis, 2015).

As you will observe above, education about sustainability and the responsibility of all to care for the planet is slowly being interwoven back into education and society in general, but it has not been without its challenges. Still today, considering our current scientific knowledge and erratic climatic fluctuations, the notion of a school or community group driven by values closely aligned with sustainable practice is far from mainstream.

Methodology

As described in the Fellowship background, the Fellow aimed to investigate various existing models and current theoretical practices for engaging large communities in sustainability-related issues and solutions through an educational/youth-oriented lens. The Fellow identified within his own context that sustainability-based education existed in most curriculum and pedagogical approaches, but often without the intentionality and purpose that is required. Strategies for the integration of the theme of sustainability as an overarching curriculum priority throughout a learning community was a major objective of the Fellow's learning experience in both school and community groups as well as during his Harvard University experience.

The methodology behind this Fellowship can be broken into two separate components; community visits (visits to schools or sustainability related community groups) & formal study (Harvard University course).

The first component of the Fellow's learning revolved around investigating, communicating with, and visiting institutions that had identified sustainability as a priority within or by their community. The Fellow conducted extensive online research, through peer-reviewed papers as well as through an affiliation with the Eco-Schools global network, to identify educational and community groups leading a movement towards

engaging young people with sustainability issues. Once a few sites were identified, the Fellow distributed a number of emails directly to each of the organisations. This email outlined the Fellowship opportunity, the Fellow's background, and the request for connection with a key sustainability leader within the institution to communicate with directly. The Fellow received a response rate of approximately 60%, which allowed for communication to continue with an individual or small team of sustainability leaders.

After ensuring that the Fellow's travel times would align with the school term and/or the organisations' business commitments, a survey was developed and administered to a diverse group of 10-15 people within the chosen community. The survey focused on 16 carefully crafted questions relating to four themes; visioning, community, practices and risks. Each community group received a score in each of these areas prior to the visit. This provided insight into which areas the Fellow would visit, questions to ask, who the Fellow would spend time with, and even who to avoid.



Image 3 - Farm on Ogden community aquaponics

Once the survey data was reviewed and patterns emerged, further questions were targeted to the individual or small team of sustainability leaders and a date and schedule for each of the day visits was constructed and agreed upon. The Fellow also requested consent from each of the people he would spend time with to capture conversation and experiences on video to assist in dissemination. During the visits to school and community groups, the Fellow spent time with a diverse cross section of community members (students, teachers, leaders, coordinators, parents, external parties) as well as in a variety of differing contexts.

The second component of the Fellow's learning experience involved undertaking a seven-week intensive post-graduate course at the prestigious Harvard University in Boston, Massachusetts. The course, *Sustainable Leadership for the Twenty-First Century*, explored what change leadership for sustainability is, and guided students to advance their related capabilities, competencies, and strategies. The personal, interpersonal, organisational, and technical dimensions of change leadership for sustainability were addressed in this thought-provoking course. A variety of specific case studies and examples of sustainability in practice were explored, including everything from green building design and renewable energy to environmental purchasing. Interdependencies between finance, politics, relationships, capacity building, technology, and more were discussed in detail, giving participants a deep understanding of the many tiers required to enact change. Students would be equipped with an experiential knowledge of change management illustrated through their completion of a real-life change leadership project within their community.

Fellowship period

The Fellow spent 25 days in the United States of America during June & July 2019, which saw him spend time in California, Illinois, New York and Massachusetts.

Fellowship biography

The Fellow, Tom Linnell has worked in the educational sector for the past ten years with a focus on environmental education and sustainability for the past five. The Fellow has also recently completed a Graduate Certificate in Religious Education from the University of South Australia, where he was able to draw many connections between sustainability and faith.

The Fellow has been involved in the following professional networks;

- » Australian Association of Environmental Educators
- » Global Catholic Climate Movement
- » Catholic Earthcare
- » Natural Resource Management South Australia
- » EcoSchools Australia

The Fellow works closely with several regional industries, developing programs which celebrate leading sustainability businesses and providing students insight and experience into a variety of environmentally responsible sectors.

Abbreviations/acronyms/definitions

Sustainability is a term used in a wide variety of contexts, all with slightly different meanings. In this report, sustainability is defined as ‘addressing the ongoing capacity for Earth to maintain life’. Further still, ‘education for sustainability’ (EFS) plays a crucial role in building awareness and knowledge to develop responsible and future oriented decisions, allowing for the Earth to continue to foster the many forms of life it presently does. EFS is an educational approach that aims to develop students, school and communities with the values and motivation to act for sustainability – in their personal lives, within their communities and at a global level, now and into the future.



Image 4 - Staff electric vehicle at charging station at BODHS

ACARA's definition of Education for Sustainability is as follows:

“Education for sustainability develops the knowledge, skills, values and world-views necessary for people to act in ways that contribute to more sustainable patterns of living. It enables individuals and communities to reflect on ways of interpreting and engaging with the world. Sustainability education is futures-oriented, focusing on protecting environments and creating a more ecologically and socially just world through informed action. Actions that support more sustainable patterns of living require consideration of environmental, social, cultural and economic systems and their interdependence.”

4. Fellowship learnings

The next section of this report will highlight key learnings from both the leading sustainability educational communities and community groups visited as well as summarise significant learnings from undertaking the Harvard University course, *Leadership for Sustainability in the Twenty-First Century*.

Sacred Heart Schools Atherton, California

Sacred Heart Schools Atherton (SHSA) is an independent Catholic school based in the San Mateo County, 50 kilometres South East of San Francisco. The school, offering a prestigious education from pre-school to senior year (grade 12), serves the needs of its affluent community, whose postcode has the highest property value of all mainland USA. The school, with its vast and immaculate sporting fields, heated water polo swimming pool and iconic red brick heritage buildings, states its mission is to “cultivate in our students a personal and active faith in God and to lay the foundation for a meaningful life”.

SHSA also caters to its community through calling on its Catholic responsibility to be ‘stewards for all of creation’ which it does so through its ‘Farm and Garden Program’. SHSA is committed to instilling within each student an appreciation and enhanced understanding of the natural world. From the preschool to the high school, students engage across disciplines in the study of natural science and environmental stewardship, integrated within the curriculum to increase student skills and experience through mandatory courses, optional electives, and independent study.

The Fellow’s personal experience of SHSA began through connecting with Dr Stewart Slafter, SHSA’s Farm and Garden Director, via email after being referred to the school by professional connections in the San Francisco Bay Area. As mentioned above, the school has a reputation as an elite school, and the Fellow was

interested to explore where exactly a sustainability initiative like the Farm and Garden Program ‘fits’ into the many high achieving initiatives on offer. The Fellow arrived at the school at 6am and was met by SHSA Principal, Jennie Whitcomb and Dr Stewart Slafter, early enough to experience a ‘day in the life’ at SHSA. The Fellow, Principal Whitcomb and Dr Slafter toured the grounds, milked the school’s goats, fed some livestock and slaughtered others, tilled the soil and tended to the many food gardens, all while discussing the program and its uniqueness in the context of the school and broader community.



Image 5 - Milking goats at SHSA

SHSA provided a long list of learnings to the Fellow, which has been summarised below;

Entry points to curriculum – Dr Slafter provided a long list of subject and curriculum areas which utilised the Food and Garden program’s spaces at spasmodic times throughout any given year. English was a notable link, with an entire literature subject devoted to the program; ‘Food Literacy’ focusing on descriptions of food, cuisine, culture and eating. History and Studies of Society also heavily integrated, with classes looking at (and reproducing) agricultural technologies from pre-industrial times. Religious themes were instilled in the program, with contemplative prayer opportunities provided prior to the slaughtering of livestock.

Mandatory Involvement – Not witnessed by the Fellow prior to this experience, were mandatory subjects for specific (Year 9) students which required direct involvement in the Farm and Garden Project. Dr Slafter confirmed this compulsory experience provided possibly the first opportunity for students to question where their food came from and set up opportunities for further involvement by engaged students in the following years through student leadership or extra-curricular offerings.

Sustainability in Isolation – The Fellow, in his previous professional experience, viewed sustainability as a holistic set of interconnected systems, with food production being one of many. At SHSA, the Food and Garden Program did not appear to explore other sustainability related issues such as energy, water, transport, or waste beyond that of the surface level. Dr Slafter and Principal Whitcomb both acknowledged that although some of these conversations most likely took place in other subjects, they doubted they would often be connected back to the practices of the Farm and Garden Program.



Image 6 - Fellow in conversation with SHSA leaders

Models of Funding – The model of funding at SHSA was foreign to the Fellow, even though both the school where he is employed and SHSA are high achieving religiously affiliated schools. The school fees at SHSA are approximately six times that of the school where the Fellow currently teaches. The median annual household income in the 94027 (Atherton) post code is over AUD\$300,000. This is significantly different from the AUD\$55,000 median annual household income in Mount Gambier, where the Fellow teaches.

School fees and median incomes aside, Dr Slafter said the generosity of the community did not often extend to the Farm and Garden Program. In a school community where USD\$1,000,000 benevolent donations were not uncommon, Dr Slafter and his Green Team relied on selling fresh produce and boutique goods to families at parent teacher Interviews or school open days to reinvest into food for animals or upgrades to buildings or tools. Stewart acknowledged the generosity of 10-15 families in the school who subscribed to a box of fresh produce weekly at an annual fee of USD \$2,000.

Disconnect of Staff and the Proximity of the Farm – Even after only spending a short time in the Farm and Garden Program, the Fellow was aware of the disconnect between the mainstream staff and the few committed to the farm. Situated in the far corner of the school campus, nestled behind manicured lacrosse fields, is where the one small cooking/preparation room that belongs to the Farm and Garden Program is situated. The Fellow quickly became accustomed to the farm's fresh, earthy smell,



Image 7 - Ms Annie Prutzman in her class overlooking Living Lab

very much different to the sanitised smells of the city which surrounded him. Dr Slafter indicated that the distance of the program from the mainstream classes as one of the reasons most teachers did not venture over often. He also noted that, like his students, most staff have become very disconnected with the systems which provide them food. Consequently, many staff had little or no idea what Dr Slafter and his team did in the space besides tend to animals and occasionally share the fruits of their labours.

Bishop O'Dowd High School Oakland, California

Bishop O'Dowd High School (BODHS) is a Catholic educational setting located in the San Francisco Bay area, offering a unique and rigorous curriculum to young people in grades 9 (freshman) through to 12 (senior). The school has an integrated range of subject options geared towards engaging its varied demographic, many of which are connected to the site's Living Lab; a four-acre wildlife habitat and outdoor classroom committed to reconnecting students with the natural world and developing a kinship with Creation. The Living Lab is located on a hillside blessed with spectacular views of the San Francisco Bay, bordering forested public land and connected to the greenbelt of the nearby Arroyo Viejo Creek.

The Living Lab began as a project to mark the celebration of BODHS's jubilee year (50th year), with staff, students and parents transforming the once neglected hillside into a vibrant outdoor classroom. The story, as shared with the Fellow by Tom Tyler (Living Lab co-founder and past teacher), identified volunteers as playing a critical role in the space, both in its initial formation through to the present day.

Located in the urban sprawl of Oakland, the Living Lab holds a leading reputation among school gardens and urban restoration sites in the state of California and is celebrated for its unique scope and size, impressive volunteer and student involvement, and ecological integrity. In recent years, building on BODHS's commitment to developing young people who have a true understanding of their role as global

citizens, the school has built the Center for Environmental Studies (CES), a 5,000 square foot LEED (Leadership in Energy and Environmental Design) Platinum-Certified learning facility with a state-of-the-art ecology and environmental science laboratory. Annie Prutzman, a long serving Living Lab educator, shared that both the Living Lab and CES have 'dissolved the walls between the classroom and the real world' and are identified as a unique point of difference for parents and young people looking at where their children can gain an education whilst connecting with the natural world.

The school is situated in a culturally rich neighbourhood, with its 1242 students (2018) comprised of 21% African American, 14% Asian/Pacific Islander, 42% Euro-American, 10% Hispanic/Latino and 13% other.¹³ More than 30% of O'Dowd students are supported through State and Federal financial aid.

BODHS was a true highlight of the Fellow's time in California, as the site was similarly sized to his current place of employment in South Australia and due to the generosity of both Tom Tyler and Annie Prutzman in sharing their time and stories. The Fellow has summarised key learnings below;

Vitality of a Dedicated Sustainability Team – The Fellow was surprised to discover in his pre-visit reconnaissance and survey circulated to staff of BODHS that their sustainability faculty consisted of seven people, with time allocations ranging from 0.2FTE (one day a week) to many being employed full time (1.0FTE) in the space. The team is comprised of roles including a Sustainability Coordinator, Living Lab Manager, Ecologist, Eco-Agriculture Educator, Ecological Gardeners, and a Director of Justice and Kinship, most sharing an office overlooking the Living Lab hillside. This collaborative and dedicated approach to sustainability was the first time the Fellow has observed such deliberate and supported financial resourcing, and the success of BODHS' numerous innovative initiatives and wide-reaching levels of engagement were evident as a result.

Service Learning and Leadership – In addition to the team of staff employed directly in the sustainability faculty, students were also heavily present in the Living Lab and other ecologically oriented programs. A requirement of every student at BODHS is a four-year Service-Learning program. Over the course of a student's schooling at BODHS, each will undertake a minimum 100 hours of community service towards involvement in and improvement of a local and global social justice issue. Tom Tyler shared that a significant number of students elected to dedicate their service learning time directly to a sustainability or ecology initiative, such as the Living Lab. Student and parents would regularly devote entire weekends to what Mr Tyler referred to as 'work day' in the Living Lab, where whole families would commit their time, labour, expertise and occasionally finances to select areas in the space, several times a term. These days assisted in building community and a shared sense of ownership, according to Ms Prutzman.

Multidimensional Sustainability – BODHS exemplified an integrated approach to sustainability education, implementing sustainable practices into all aspects of its learning, leadership, purchasing, infrastructure and culture. This was evident from the moment the Fellow entered the school grounds, where he saw electric car dedicated parking and charging facilities, numerous water capture points, ecologically sound building design and material, and clear signage conveying the many sustainable practices employed. Both Mr Tyler and Ms Prutzman spoke of the instrumental support given by BODHS's Board and Leadership Team, with all members seeing a clear connection for the school to model best ecological practice and their calling as a Catholic community as akin with Creation. Importantly, BODHS's vision for a more sustainable school community was clearly articulated in several strategic locations resulting in a communal goal which all played a role in working towards.

Renewed and Aligned Charisms – BODHS's unique and intentional sustainable journey played a role in reshaping the school community's mission statement and charisms when it was acknowledged they were due for review. BODHS's mission statement states;

“Bishop O’Dowd High School is a Catholic college-preparatory community, guided by the teachings of Jesus Christ, that educates its diverse student body to build a more just, joyful and sustainable world.”

Ms Prutzman said the wording that, ‘students contribute towards a more sustainable world’ was not an accident and was a legacy to those who had committed so much of themselves to the Living Lab and more recently, the Center of Environmental Studies. BODHS’s motto of “Finding God in All Things” is another sustainability extension of this legacy paved by past students, educators, parents and community members. The high school states a “charism” is a gift of the Holy Spirit and a set of spiritually inspired core values. At O’Dowd, their inclusive charism, “Finding God in All Things” calls all members to instil: community in diversity, strength of character, academic excellence, kinship with creation, social justice and joy. Ex-teacher, Mr Tyler was proud that the theme of kinship with creation was explicitly named as one of the six charisms all members of the large community upheld.

Academy for Global Citizenship, Illinois

The Academy for Global Citizenship (AGC) is a public charter school located in the underserved Southwest side of Chicago, Illinois. AGC offers an innovative and holistic approach to education, striving to foster systemic change and create informed global citizens. The AGC team have designed a relevant, engaging and challenging educational program for all children enrolled. Their inquiry-based learning curriculum provides opportunities for young people to construct meaning through theme-based units of study. The school is an authorised International Baccalaureate (IB) school that also teaches subjects through a dual language approach (English and Spanish). AGC offers an exciting program across two campuses, prep to grade 5 at the junior school and grades 6-8 at the senior school, a short walk down the road. The school has been running for 11 years and has grown to support 450 students with a healthy waitlist. The ethnic demographic of AGC’s student population is 90.4% Hispanic/Latino, 4.5% African American, 4.5% Euro-American and 0.6% other.

The school has 66.3% of its families identified as ‘low income’ and 33.5% declared having ‘limited English’ in the home.¹⁴

AGC’s mission statement aims to ‘develop mindful leaders who take action both now and in the future to positively impact their communities and the world beyond’. The school also identifies six key values, closely aligned to their mission statement, which include;

- » serving the whole child
- » modelling academic excellence
- » developing inquirers
- » cultivating international awareness
- » fostering environmental stewardship
- » facilitating collaboration within the community



Image 8 - Students gardening at AGC

Environmental sustainability roots AGC's education in the natural world. The community believes that learning in harmony with nature provides opportunities to understand the relevance of our education. Learning from natural processes is a powerful vehicle for teaching our students about the connection between their everyday choices and the health of the community, the environment, and themselves.

Marnie Coleman, AGC's Sustainability Coordinator, stated that each of these values are equally present in each class and that in her role, she saw sustainability as an important bridge connecting various subject areas. "Our kids are approaching sustainability through reading primary source documents, analysing data in maths classes or understanding the cycles and systems of climate change over time." Students in grade 5 spend 6-8 weeks in a self-guided research project on a chosen sustainability issue, which requires interviews and field trips. Ms Coleman said each year, more and more students are selecting social justice issues which are closely aligned with themes of sustainability.

Saskia Rombouts, AGC's K-2 Principal, said that outdoor learning was a key component in the design of a new campus but that it was parents that needed the most convincing as to the value of this type of teaching style. "With our kindergarten families, typically there is a lot of pushback about kids getting dirty or that it's too cold outside". The school has an open-door policy, encouraging parents, grandparents, past students and past teachers to contribute and share with classes.

AGC Wellness Coordinator, Bryan Soto, said the school has even incorporated sustainability and ecological practices into their 'Wellness Wheel'; a tool employed by students and staff to reflect imbalance or issues in their own wellbeing. 'Environmental Wellness' is one of the six key dimensions the community learns about and explores the relationship individuals need to have with the natural world in order to feel their best.



Image 9 - Students leaders in AGC food gardens

The Fellow's time spent at AGC was a rewarding and insightful experience, demonstrating the way an International Baccalaureate program, dual language approach and education for sustainability can be not only successfully integrated but a replicable model elsewhere. The Fellow has summarised key learnings below;

Scaffolding Sustainability – Ms Coleman shared that the school's curriculum mapping document, which shows a very intentional experience of sustainability as students mature through grades. Marney states, "In the early years, it's less focus on doom and gloom and more focus on exploration". One example she provided was where Grade 1s investigated ecosystems and rather than look at themes like deforestation or plastic pollution, the classes focused more on getting kids excited and curious about the natural world and how humans interact with it. This conscious awareness of the plasticity of young people's developing minds regarding environmental/world issues is a nuanced approach and allows for a better hope-filled experience of the natural world.

Sustainability in Action – In meeting with Mike Suto, he shared with the Fellow his first impressions when arriving at AGC many years prior. He was surprised to see a school that did not just teach about sustainability in the classroom but one which put it into practice throughout the school infrastructure and learning spaces. Practices including generating electricity through wind and solar, compost systems and only organic seasonal and locally sourced food in the cafeteria are all great examples found at AGC. Even more importantly is how the students interact with each of these sustainable practices through integration into their learning programs.

Communal Engagement – Marnie Coleman discussed the value of holding an ‘Exhibition’ afternoon at the conclusion of each of the inquiry-guided 8-week learning blocks. These open sessions encouraged parents and families into the school as well as specific experts in the wider community, to engage in the individual learnings of the students. Ms Coleman said, “the big culminating research project was an exhibition which regularly focused on sustainability issues and it is not only the students who become experts on the issues, the entire community becomes more aware”. This open channel of dialogue between students, staff, families and the wider community allows for all to continue to learn about sustainability and explore behavioural changes inside the school and community.

Staffing Challenges – AGC’s K-2 Principal, Saskia Rombouts, stated one of the biggest challenges of prioritising so many specific facets at the school (whole child wellness, International Baccalaureate, dual language, sustainability) was finding appropriate and passionate staff. Many staff, she noted, had experience or knowledge in one or two of these areas, but finding someone who had all four was extremely difficult. This would mean that the school often had to invest significant time and resources into appropriate professional development in specific areas for new staff to the College. Marnie Coleman also noted that for sustainability education to be fully explored in the classroom, it requires teachers with more than just an understanding; it took passion.

Brooklyn New School, New York

Brooklyn New School (BNS) is a pre-kindergarten through to grade 5 school, located in New York’s Brooklyn. BNS caters to the educational needs of 726 students who come from a wide variety of social and cultural backgrounds. This unique school was founded in 1987 by a dedicated committee of teachers and parents who wanted to build a school;

- » with a racial, ethnic and economic balance
- » where children engaged in active learning
- » where children of different skill levels work together
- » where parents are involved in their child’s education

The current ethnic mix for BNS is 41.4% Euro-American, 22.6% Hispanic/Latino, 16.9% African American, 13.7% multi-racial and 4.9% Asian. The school supports more than 1 in 4 students (28.1%) identified as needing ‘special education’. The specialised hands-on education offered at BNS is sought out by families located far and wide around the Brooklyn borough.

BNS believe children to be naturally thoughtful and curious, working to gain understanding of the world they inhabit. The pedagogical approach at BNS is driven by student inquiry and encouraged integration of curriculum/subject areas. The school focuses what the students learn largely through all-encompassing thematic units which include topics such as the city, the environment, history and culture. Interwoven throughout these units are sustainability related themes, which Principal Anna Allanbrook has credited to a higher level of thought by students, saying “Since we have instituted a strong focus on teaching an eco-based curriculum, our students have shown increasingly sophisticated answers to questions dealing with the negative and positive impact humans can have on the environment”.



Image 10 - Students cleaning garden barrels at BNS

The sustainability program, led by science teacher Barbara Taragan and Sustainability Coordinator Johanna Esteras, allows for students to learn about globally important issues across the grades and curricula. First graders raise crops in the school garden, use the compost they produce from their cafeteria scraps on their raised beds, and harvest and serve their produce. During this work, the students explore green spaces in and around the school community — including parks, community gardens, and other urban farms.

“They learn what green space means to the health and well-being of humans, and the positive (as well as negative) impact humans can have on green spaces,” says Ms Taragan.

Second graders learn about the importance of water as they engineer ways to collect water, including; designing a water filtering system, creating rainwater catchment systems, and building pipe systems to meet a variety of challenges. This spring, they will create pipe systems to irrigate the school’s gardens.

But sustainability is not just present inside the classroom at BNS. Environmental initiatives extend to the corridors, play spaces, gardens, carparks and into the community and homes. One very visual example of this is the schools ‘Eco-Casita’, an outdoor classroom housed in a converted shipping container and equipped with a green garden roof. Another statement of sustainability is BNS’s Green Studio; a room devoted to sustainable projects and activities. This space was brimming with ‘ecoramas’ (habitats for stick insects built by students), loose recycled parts to be reused and unique plant cuttings undergoing propagation. This space allows for student leaders to convene, specialised sustainable projects to be delivered and it can squeeze in a class in a pinch.



Image 11 - Students moving garden barrels at BNS

The time spent at BNS by the Fellow was invaluable, seeing how this community came together to support young people to be successful and engaged learners. The Fellow has summarised key learnings below;

Adults Welcome – Upon arriving at the BNS, the Fellow crossed paths with numerous parents, caregivers and members of the local community. After querying BNS's Principal, Anna Allanbrook, about why so many adults were in attendance, she said the school was fortunate to have a strong adult presence every day volunteering inside and outside of classes. Local community members regularly assisted in sharing specialised information, whether about native flora or fauna or a variety of languages. On the day of the Fellow's visit, several classes were undertaking an excursion to a nearby park to explore the trees, plants, animals and cityscape behind it. One of the parents in attendance commented when questioned about their involvement; "A day with my children and their friends in the park, who wouldn't take the day off work". A few teachers supervising the excursion said that parents were always welcome to join in any classes at BNS and were never in short supply.

Making Sustainability Visible – The BNS community is very intentional about displaying the sustainable fruits of its labour. For a school with only a small amount of space for outdoor play (predominately bitumen), BNS's many sustainability initiatives consumed a significant footprint. Areas such as their Eco-Casita shipping container with its green roof, chicken coop and run, composting area, food gardens and loose parts play, would roughly equate to half of all outdoor space. This means that BNS students not only learn about sustainability in class, they get to experiment and play in sustainable spaces at break times also. This is also true of BNS' Green Studio as mentioned above, which is a learning space dedicated to nature-based education.

Sustainability and Special Education – The statistics illustrating student demographics above indicate that, 28% of students enrolled at BNS are identified as requiring a 'special education'. Sustainability Coordinator, Johanna Esteras said she wasn't surprised that families selected BNS because of its hands on and practically-oriented programs for the children requiring special needs education. The inquiry-lead

programs allow students to pursue topics and themes that interest and engage them personally, leading to a more successful education. Ms Esteras also noted the wide spectrum of needs of students considered 'special', with some having social, emotional, cognitive, physical, mental or medical impairments. The school's focus on learning about the natural world by spending time in it was a form of 'medication' for some of these students who would often seek Ms Esteras during lunch times to assist with tending to the gardens or help with specific projects.

Sustainability Community Groups

During the Fellow's time in the cities of San Francisco, Chicago, New York and Boston, he connected with a few community organisations and groups who had a link to sustainability. In the subsequent paragraphs, some of these groups are explored.

Faith in Place, Chicago

Faith in Place is a not-for-profit ecumenical organisation who have worked in over 1,000 churches, mosques and other houses of worship to educate, connect and advocate for greater care for the Earth. The organisation employs a significant number of people from various faith communities across the State of Illinois to assist communities in the implementation of sustainable initiatives through their four broad programs; Energy and Climate Change, Sustainable Food and Land Use, Water Preservation and Advocacy. During the Fellow's visit to the Faith in Place offices in Chicago, he spoke with several of the team leaders about the program and how they help and engage each of the many faith communities in Illinois to apply their own unique culture, history, context and theology with practical steps for them to better care for the planet. The Fellow found the success of the "Green Team" model to be very interesting, which sees teams of three or more interested and aware individuals in each faith community incorporate environmental consciousness into all activities and celebrate accomplishments. Faith in Place staff work alongside the Green Team to put programs into action that promote a healthy planet for their neighbours and future generations.

Farm on Ogden, Chicago

Farm on Ogden is a community facility that supports and sustains a healthy urban community by bringing food, health and employment together in one location. The site, comprising of high-tech hydroponics, aquaponics, community gardens, market produce store and cooking and healthy eating sessions, has partnered with the nearby Lawndale Christian Health Centre (LCHC) to create an innovative and successful outpatient and community program with a 'whole person' approach to health and wellbeing. The "Veggie Rx" program, in conjunction with LCHC, has community members prescribed upon discharge with grown on site fruit, vegetables, herbs and fish, to improve their recovery rates and lifestyle choices. The facility pairs this prescription with daily cooking lessons focussed on ways to use the produce, assistance with growing food at home and keeping active through volunteering in the community gardens on site. The holistic approach to health lifestyles, community interaction, and food production provided a unique perspective to the Fellow.

Plant, Chicago

Located in a former meatpacking plant, Plant Chicago is a 100,000 square foot facility of collaborative small food businesses, all focused on growing, producing and sourcing sustainable food products. Plant Chicago is home to innovative indoor and outdoor farms, kombucha and beer breweries, a cheese distributor, coffee roaster, and even an ice artisan. The site employs roughly 85 full time employees and many more volunteers from within the local community. Plant Chicago was founded on a model of closing waste, resource and energy loops and is working to demonstrate what a truly urban food production precinct can look like. Centred on an anaerobic digester aiming to process all the excess waste and produce a valuable by-product of rich humus, Plant businesses support one another via their various waste products. For example, the indoor farms enjoy the excess carbon dioxide and heat generated by the beer/kombucha brewing process through a series of ducts. Another example can be found in an aquaponics start-up, where fish are fed the spent barley from the brewery. The excess ammonia and nitrates from the aquaponics process are utilised by a microgreens company. The Fellow

found this circular economy approach to be a great example of sustainability in action, with local businesses working together for the success of a collective.

Brooklyn Grange, New York

Brooklyn Grange is the United States' leading rooftop farming and intensive green roofing business, operating the world's largest rooftop soil farms across three New York City sites and growing more than 35 tonnes of organic produce per year. Since Brooklyn Grange began in May 2010, the space and team have expanded to hosting events, educational programs, designing and installing rooftop farms across the globe, and consulting on many other related issues. Their business also operates an apiary, keeping bees in dozens of naturally-managed hives, on roofs, backyards, and nooks dispersed throughout NYC. The Fellow undertook a tour of the original Brooklyn site, which is home to a cornucopia of produce, tended by paid staff, volunteers and members of the community who pay to be taught how to rooftop garden. Exploring a productive rooftop as vast as Brooklyn Grange's was a new experience for the Fellow, and supported his interest in innovative and intensive food production methods for urban areas.

Harvard University

Universities have 'accountability to the future' - a special role and responsibility in confronting the challenges of both today and also tomorrow. The prestigious Harvard University, established in 1636, is testament to this statement, dedicated to '*institutionalising best practices in sustainable operations and translating research and teaching into practice by using our campus to pilot innovative solutions that can be widely replicated*'. Harvard University's Sustainability Plan (2015-2020) aims to transform the University into '*a sustainable community that contributes positive social, economic, and environmental benefits*'. At the heart of Harvard's research and teaching mission is '*to educate and empower our students while on campus to become leaders who will use their knowledge to create sustainable impact in service to the world*'.

These idealistic and future-oriented commitments and Harvard University's long-

standing excellence in education motivated the Fellow to explore a range of course offerings that would further his sustainability leadership pathway. Through email and verbal consultation with Jack Spengler (Professor of Environmental Health and Human Habitation, Harvard T.H. Chan School of Public Health) and Australian ex-pat Leith Sharp (Director and Lead Faculty of the Executive Education for Sustainability Leadership at Harvard's Centre for Health and the Global Environment), the Fellow was accepted into the *Sustainable Leadership for the Twenty-First Century* program. This course, offered through a combination of intensive onsite and external study components, aims to inspire and enable people to lead effective change towards environmental sustainability, enhancing individual change agency skills as applied to a variety of organisational contexts.

The Fellow found the Harvard course to be transformational in relation to teaching ways to better action change in the numerous and varied communities he interacts with. He also found the opportunity to undertake the 8-week intensive study with other likeminded sustainability professionals to be an unexpected highlight of the course, learning alongside CEO's, city mayors, politicians, heads of not-for-profit organisations, urban planners, and engineers from across the globe. Several specific concepts explored in the course have been expanded upon below:

Social Mediums – Course facilitator, Leith Sharp, spoke explicitly about the notion of the 'squiggle'; the natural path which an initiative, project or idea will take from inception to completion, despite effective planning, team management and community engagement. The narrative people see, or are more often told during the lifecycle of a sustainability-based project is one which traverses smoothly from point A to point B. In real life, it is much more of a squiggle, which takes many twists and turns, some positive and others to the detriment of the initiative. The secret to ensuring there are more progressive turns than negative is in curating a positive social medium. The course explored the notion of a community as an ecosystem, with people who have gifts and talents that add value to the endeavour and other groups of people that might be best to engage with after the early adopters have become supporters. In any sustainability-based initiative, having a well-informed awareness of your community ecosystem is critical.



Image 12 - Students engaging in outdoor play at BNS



Image 13 - Converted playground to food garden at BNS

Flow – As mentioned above, most projects do not simply travel from point A to point B; they often seem to require a detour via X, Y and Z. The course explored flow as a goal of project management, with each successive step building upon the positive momentum from the previous. Regarding sustainability-based initiatives, the Fellow learnt the value of celebrating even the smallest achievements of a project with the community, propelled forward towards the greater goal. The opposite of flow is friction, which the Fellow had experienced when implementing a few initiatives without first understanding the needs or concerns of his community. Flow is an important fuel for all teams: it motivates and empowers them to confidently move towards bigger and more audacious goals.

Sensing, Pivoting and De-risking – A ‘Change Agent’ (someone leading change in a community) aims to reduce risk across all spheres of the organisational ecosystem. They must diagnose what the risks are for everyone and then prepare the information to address those needs continuously. A Change Agent must gather and format different kinds of information along the way to enable the right people to feel that their needs have been addressed. This is what the course called ‘sensing’. Without first sensing the needs of each stakeholder and strategising ways to best meet their needs, projects rarely succeed. A pivot is the need to intentionally alter the perceived best path towards the goal due to changes in internal or external factors. These factors might include a change of leadership or to the team in general, the emergence of new knowledge or technology, stakeholder support or even a serendipitous opportunity. A pivot is not a failed attempt; it is an opportunity for learning and honing ever closer to a specific goal. Ms Sharp spent significant time exploring the importance of de-risking change. “Effective change leadership is about creative stability as much as it is about creating change”. The course investigated a number of strategies to help de-risk projects and ultimately create positive change in the space of sustainability, which included;

- » piloting on a smaller scale
- » identifying influencers and their needs
- » positive psychology
- » link to the vision or mission of the organisation

The Fellow has had success since returning from his Fellowship employing tactics in de-risking.

Biomimicry – Somewhat surprisingly, the Fellow found the course material and conversation dialogue to be rich in references to the systems found in nature. Biomimicry, as the course stated, “is the conscious emulation of nature’s genius”. It is a new way of viewing and valuing nature, based not on what humans can extract from the natural world, but what they can learn from it. The use of biomimicry to draw communities together towards sustainability or environmental goals made a lot of sense and is something the Fellow is eager to make use of when working with a variety of teams.



Image 14 - Harvard University classroom courtyard

5. Personal, Professional, and Sectoral Impact

Personal impact

The Fellowship experience has allowed the Fellow to further ignite his passion for sustainability education and expand his knowledge and toolkit when working towards change. He feels honoured to have spent time in the presence of such experienced and impassioned individuals and teams, and developed friendships which he hopes will endure for many years to come. The Fellow's presence in each of the many schools, community groups, not-for-profits, as well as at Harvard University, has allowed him to see many new and innovative approaches to an educational experience which fosters sustainability as well as strengthening communities.

The Fellowship experience has also fostered confidence in the Fellow, better understanding the important role he plays in the many other communities he supports. The experience, through the conversations of the many inspirational individuals, has allowed him to see that he not only has the necessary skills, vision and tools to pursue a successful career in sustainability, he is exceptionally motivated and has an energy that people connect with.

Additionally, the experience has expanded the Fellow's range of academic literature he engages with and has heightened his moral obligation to enact positive sustainable change at a local and global level.

Professional impact

On a professional level, the Fellow has been able to share his Fellowship experience with fellow teachers, students, parents and a wide array of members from within the community. He has presented his experience and subsequent findings to a range of people, through keynote presentations and workshop sessions in South Australia and Victoria. The experience has enabled an additional level of authority and knowledge when reviewing settings, developing plans, engaging communities and generating change.

As a direct result of the Fellowship, the Fellow is now lecturing and tutoring education students at a local university, with a focus on sustainability-based education. The Fellow is confident that this broader opportunity to impart his enthusiasm and knowledge for sustainability to future teachers will generate impact for years to come. While working at the university, the Fellow is eager to pursue a master's degree in education, with a specific emphasis on education for sustainability.

Lastly, through the numerous conversations with the plethora of sustainability professionals he engaged with during and following his Fellowship, the Fellow is eager to explore the opportunity for his own sustainability consultancy business, assisting to drive sustainability across a myriad of community sectors.

Sectoral impact

The Fellowship experience has supported the Fellow to further advocate for sustainable change across his sector of Catholic schools in South Australia. The Fellow has been fortunate to present not only his experiences to a number of the CESA (Catholic Education South Australia) staff, but also to engage in specific strategic planning sessions with State leaders. The Fellow is working towards a common approach and language for each of the 103 CESA schools regarding sustainability, enhanced by the Pope's 2015 call to action, 'Laudato si'. The Fellow hopes to further his relationship with CESA leaders to reduce energy, water and waste, while developing sustainability-aligned curriculum rich in practical, contextual and engaging content. One strategy he has begun to implement is a quarterly *Ecological Conversion for CESA Educators* conference to build on a system wide approach to sustainability driven through faith. Since his return, the Fellow has played a significant role in the founding of a South Australia charter of Catholic Earthcare and remains an active member.

6. Recommendations and considerations

From his Fellowship in the USA, visiting leading sustainable schools and community groups as well as his eight-week study at Harvard University, the Fellow has expanded upon key themes pivotal to Education for Sustainability literature.

Transformation and change

Education for Sustainability involves equipping all people with skills, capacity and motivation to plan and manage change towards sustainability within an organisation, industry or community. For this to occur, people need to be well informed, highly engaged and have their needs considered in the change process. The people facilitating change also need to be motivated and passionate individuals or teams, aware of their own drivers as well as potential barriers. Positive and longstanding change requires persistence and is defined by the behavioural changes of all individuals involved in both the short term and the long term.

Education for all and lifelong learning

Education for sustainability is driven by a broad understanding of education and learning that includes people of all ages and backgrounds and at all stages of life and takes place within formal and informal learning places, including schools, workplaces, homes and communities. The Fellow observed the engagement of sustainability through a wide variety of ways and by an even wider array of people. One critical learning for the Fellow is that you need to 'meet people where they are' on the journey of sustainability. Not everyone simply 'gets' it, and it is the job of the change agent to unpack the importance of this theme for all people regardless of where they might be in individual journey.

Systems thinking

Education for sustainability aims to equip people to understand connections between environmental, economic, social and political systems. Whether businesses, industry, communities or schools, organisations are living and evolving organisms and operate best when considered as a system. One component is dependent on another, and another on that. A change maker cannot simply change one thing without understanding the range of potential ramifications further downstream. When looking at organisations, it is best to consider each a unique ecosystem.

Envisioning a better future

Education for sustainability engages people to envisage diverse, sustainable futures. For people to commit to such a vision, they need to be involved in creating it. The most successful sustainable schools and community groups that the Fellow spent time with, had members (students, staff, parents, employees) who were actively involved in the development of a strategic vision. These teams assessed their unique reason for action, current situation, areas for celebration and improvement and defining goals. They worked together to ensure accountability and continued momentum toward the common objectives.

Participation

Education for sustainability recognises community participation as critical to the collective shift towards an environmentally sustainable society. In each of the communities visited during the Fellowship, the Fellow felt a communal obligation from all members of the community. One teacher commented that, "Individuals change behaviours, but collective behaviours change communities", and this comment resonated with the Fellow. The job of a change agent is to provide several varied entry points for participation in any one community.

Partnerships for change

Education for sustainability focuses on partnerships to build networks and relationships and improve communication between different sectors of the community. The Fellow was fortunate to grow his network exponentially during his Fellowship but acknowledges opportunities like this are limited. He would encourage others interested in undertaking sustainable change in their community to seek out a 'champion' that most likely already exists and develop a team of motivated individuals to work with. This mix of people can share roles and responsibilities as well as motivate each other. For sustainable projects and initiatives to have greater impact, they should be integrated across communities and sectors.

The Fellow observed a myriad of opportunities for the Australian education system and government to build on the experience and practice of leading sustainability communities in the USA. Key recommendations are outlined below;

Australian education sector

- » A thorough review of the inclusion of sustainability as a key cross curriculum priority in primary and secondary schools across Australia, to ensure schools are accountable in meeting this important curriculum component.
- » Alignment of the Australian Curriculum to include direct reference to the Sustainable Development Goals (SDG's), a United Nations blueprint towards solving global challenges.
- » Stronger channels of communication between industry, business and education to develop mutually beneficial sustainability objectives and improve employment pathways.
- » A sectoral directive to fund a sustainability coordinator in each school community, to review and/or implement curriculum, connect with local industry and work as a network of change agents across the country. In addition, this role could report to a line manager, who would liaise with coordinators across a region.

Local Government

- » An obligation for Local Governments to support educational institutions (Early Years, Primary, Secondary and Tertiary) as well as sustainability related community organisations. This may be through a dedicated team of sustainability professionals providing consultation, networks, grant/funding opportunities or organisational guidelines.
- » Integration of the Sustainable Development Goals into community strategic plans and further dissemination across the community.
- » Mayors and local government modelling community action and agency for sustainability and climate change.

Engage local government employees and communities in sustainable development issues through initiatives, incentives and events.

State and Federal Government

- » Ensure a common language for measuring progress against sustainability goals and targets.
- » Strategic reporting for education for sustainability and business for sustainability in line with the Sustainable Development Goals.
- » Refrain from the use of political rhetoric and dichotomy between economy and environment. Federal Government often pair 'good for environment' with 'bad for economy', resulting in minimal progress and a divided community.
- » Follow the political lead of countries such as Sweden, Denmark, Finland, Germany, France and Norway who each score highly in SDG 'Quality Education', 'Climate Action', and 'Sustainable Cities and Communities'.

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8. Appendix

Appendix Item 1

Interview Questions (Schools)

- » Please share with us your name and the role you have within the school?
- » What do you believe is the overall goal of your School/College/Academy and how does the ever-important theme of sustainability fit in?
- » How/When did this idea and school mission come to be?
- » How has the school community come together to support the sustainability mission?
- » What challenges did your school community faces with the integration of a sustainability focus?
- » Do any individual moments or stories stand out from your sustainability efforts/the transition?
- » How has sustainability been integrated into the curriculum?
- » What kind of sustainable resources/initiatives do you have on campus?
- » How do you believe the teaching practices differ between a school that teaches through a sustainability lens and one that doesn't?
- » How would a new student find their day-to-day school life different than at your typical public school?
- » What is the biggest change you've seen in your students?
- » What opportunities does your sustainability focus provide for authentic student leadership in this space?
- » What has been the most difficult adjustment for the teachers?
- » What has been the most difficult adjustment for the students?



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