Program Development at the Outback: Exploring Place-Based, Experiential Education through a Campus Farm.

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Program Development at the Outback
Exploring Place-Based, Experiential Education through a Campus Farm.

Paul Kearsley
in partial completion of the
Masters in Environmental Education

w/ Dr. Nick Stanger
Huxley College
Western Washington University
Spring 2017
Acknowledgments

Learning is a collaborative process.
This particular process was also a bit protracted, labor-intensive, logistically challenging, ephemeral, bureaucratic, dirty, smelly, questionably legal and consistently overwhelming.

Needless to say, I could not have done it alone. Following people were instrumental in this effort and should this project bear fruit, they will be the first to try it out.


Tommy Thompson, Albert Strasser, Della Mueller, Max Parsons, David Stein, Maddie Price, Tyler Mead, Zach Martin, Rose DeLorie, Tim Keal, Jacob Gerstner, Olas Perpich, Megan Johnson, Alyona Gudima, Julian Tennyson, & Jud Daffern.

Thank you to my Family and Friends. Sorry I have been so busy these past three years. I hope these 30 pages make some sort of sense for my absence.

Special Thanks to Dr. Nick Stanger- Thank you for your guidance, support, ideas, humor, practicality and willingness to bend the system into something like a panarchic potato chip.

And finally, I would like to dedicate these past three years of work to my beautiful wife, Jane Campbell. Throughout this whole process we built a home, found a farm, broke a back, had a wedding, ate breakfast and lived every day together. Thank you for understanding, challenging & inspiring me.
Section 1.1 Introduction

When teaching about systems thinking, the first idea I present is that everything is a system. When teaching about design, the first idea I present is that everything has been designed. I have been pleased to find that environmental education also embodies this ubiquitous perspective.

Context

This project began nearly five years ago. While working as an entrepreneur, landscape designer, and educator I grew very comfortable in a range of different disciplines. My work was practical, engaging, and valued by many different audiences. While considering my future career, and the potential to expand my reach, I began to look for a more refined niche. Ideally, this position would have a strong relationship with a piece of land, a consistent stream of eager and interested students, and a degree of creative freedom through which we could explore, learn and teach.

In time, my searching led me to the Outback Experiential Learning Program (The OELP or The Outback) at Western Washington University (WWU). The Outback has been an element of the WWU campus since the 1970’s. The space is a student-led farm, which provides opportunities for learning about sustainable living, and agriculture. The Outback has been considering a strategic transition for a number of years, moving from the current status as an exclusively student-run program, towards the integration of a non-student staff position to foster long-term growth and development of the project. This paper represents a strong promotion for the development and piloting of a staff position in order to improve the programmatic offerings and develop the educational site to its fullest potential.

I was introduced to the field of Sustainable Design as an undergraduate at WWU. While studying Industrial Design, I was compelled by the application of my newly learned design skills to fundamental problems regarding the human experience. The Sustainable Design Minor was an excellent introduction to the foundational ideas and theories of contemporary sustainability.

Immediately following my undergraduate studies, I spent two years in an intensive place-based apprenticeship program. The site was the Bullocks Homestead on Orcas Island, WA, and the curriculum focused on off-grid homesteading and sustainable design. This education showed me the invaluable lessons of working with your mind and body while applying theory to bio physical, technical and social systems.

After two years on the homestead, I founded and managed an edible landscape contracting business in Bellingham, WA, with two of my fellow apprentices: Homestead Habitate LLC. I also founded a sustainable design consultancy with two of my mentors: Terra Phoenix Design LLC.

Education has been a primary goal in both of these businesses. Much of my work involved the transparent communication of our design process as well as collaborative installation and long-term relationships with clients regarding maintenance and care for the spaces we were developing. This was an engaging and important component of our practice that differentiated us from many other companies. It was also very challenging and equally rewarding.

Since 2009, these professional experiences have shown me the need for more designers, entrepreneurs and practitioners who can apply sustainability theories as valuable and marketable services to meet real world needs.

With this in mind, I have focused my graduate studies intensively on place-based, experiential education in sustainable design and urban ecology for college students and young adults. Developing and achieving a long-term staff position in the OELP offers the highest potential and capacity for a pedagogy of this nature.

1.2 Definitions

Throughout my education and professional career I have seen a wide range of terms emerge, evolve and disappear. My definitions have also changed as my understanding of and relationship to these ideas has matured. To be clear, the following definitions represent my perspective at this time regarding these most relevant topics.

Environmental: The dominant American perception of the “Environment” presents a world out past the edges of the man-made urban and suburban construct. Embedded within this definition is the notion that humans and their creations are distinctly separate from the “Environment”. The words “nature” and “wilderness” both suffer a similar treatment. William Cronon addresses this issue in his notorious writing “The Trouble with Wilderness”:

“One of my own most important environmental ethics is that people should always strive to be conscious that they are part of the natural world, inextricably tied to the ecological systems that sustain their lives. Any way of looking at nature that encourages us to believe we are separate from nature-as wilderness tends to do- is likely to reinforce environmentally irresponsible behavior.”

Though it has at times proved contentious, my preferred definition of “environment” is one from the visionary designer Buckminster Fuller. In his writings Bucky defines the universe as everything, and the environment as everything other than the self 1. By this definition and in the context of this writing, every pixel, byte, page, the author and the reader are all a part of nature, each individual existing within its own unique environment.

Environmental Education: As I perceive it, Environmental Studies addresses the relationship between human cultures and their environmental conditions. Teaching within vague parameters such as these turns Environmental Education (EE) into a malleable perspective through which one can address a wide range of topics. It can encompass hard science and the STEM agenda, systems thinking, place-based or experiential education, and it can provide profound lessons in philosophy, community and oneness.

Understanding EE as a perspective instead of a prescription creates a flexible and versatile educational toolkit that crosses a broad range of disciplines and possesses a profound potential for depth.

In respect to the ubiquitous nature of EE, it is important to note that teaching our children how to treat their environment is a foundational component of all cultures. Ancient mythology was imbued with lessons of the seasons and the stars. Recycling programs and phone apps for identifying bird calls both demonstrate the cultural significance of our relationship to our environment. Likewise, by not addressing our cultural relationship to our immediate ecology, we demonstrate a societal disregard for these systems, which is a lesson in and of itself.

Ecological Design: The seminal book Cradle to Cradle critiques the modern fixation on sustainability and “Eco-Efficiency”. (“Eco-Efficiency) ... works within the same system that caused the problem in the first place, merely slowing it down with moral prescriptions and punitive measures. It presents little more than an illusion of change.” 1

Indeed, modifying our consumption and disposal are necessary steps towards a better cultural relationship with nature; it is important to be “less bad”. However, this strategy falls short of doing actual good.

Environmental discourse rarely transcends the line between humans as destructive consumers and humans as creative producers. It is not widely acknowledged that humans can rebuild topsoil, improve biodiversity and regenerate healthy watersheds. In fact, people have been doing these tasks across cultures, through generations and over centuries.

Since it fits the current cultural context of my work the term sustainability will be used throughout this document. However my specific goal as it relates to Ecological Design is to move beyond the ideas of “less bad” and cross over with a focus on reconnecting with place, creating and having mutually beneficial relationships with our environment. This is synonymous with the term “Permaculture”.

design: The lower-case d is intentional. It represents my effort to design a more accessible practice.

I have been teaching design through WWU since 2013 and find that many people believe that only designers design. To begin my courses I often solicit a definition of design from my design students. Their responses are generally vague explanations regarding problem-solving, aesthetics and the Adobe Suite.

We work through the various applications of the term and end up with a definition both definite and ambiguous: Design is the organization of parts into a whole. This definition encompasses a wide range of processes from computer-aided design to cooking breakfast. Design-based learning is an integral component of my teaching philosophy and the democratic, inclusive, all-encompassing definition is the basis for that pedagogy.

Additional Terms: The Associated Students- A student group providing services and programs for WWU students. AS Student Coordinators - Half-time student employees who manage the OELP. System- Parts organized into a whole.
1.3 Educational Philosophy

Our education is an ongoing and ever changing process that begins at birth and only resolves when we pass away. As a lifelong student, my educational philosophy is subject to this same relentless revision and hopefully refinement. My teaching practice reflects my own learning process. For many reasons, I have grown accustomed to learning through a very tactile, hands-on approach. This is often impressed reactions. Smaller scale participation in the way that I learn. Most of my courses are hands-on and skill-based. Subjects of this nature offer immediate feedback, which provides opportunities for correction and calibration during the learning process. This feedback allows for intentional, meta-cognitive reflection from the learner and through my experience, can yield remarkable results. It is understood that this type of learning is ill-fit for conventional academic discourse. So often, higher education is little more than a process of transmitting information. Students develop familiarity and eventually mastery of a subject by reading, understanding and interpreting the works of other masters. Eventually, their work is referenced by the next generation of students and the cycle continues. Personal narratives are too subjective to withstand the rigor of conventional academic scrutiny. But space exists for a less conventional and more personal approach. Many educators are advocating for a process of learning through experiential application and personal reflection. The value that personal experience can bring to research based fields is poignantly presented in Cynthia Chambers’ “Path with Heart.”

“Narratives are crucibles that hold the events, as well as the pathos, logos and ethos, at work in each story. Through stories teachers/researchers record significant events, and like the origami meaning of re-cord, through stories those significant events are passed back through the heart again.”

This document records my personal narrative as I learned my way through a Masters of Environmental Education. Significant works from the canons of EE certainly influenced my path and I will give credit to the masters, where credit is due. In tandem with the conventional processes of higher education, I was learning through the direct and intentional experience of applying concepts to existing lessons, experimental courses and ongoing administrative projects. This led to the continual development of my practice and refinement of my goals. With such an intentional and intensive emphasis on experiential learning, my primary source for this project is my own a reflexive narrative.

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1.4 Learning Process

This project plan is a multifaceted representation of my educational philosophy. It embodies both my learning process and teaching practices in a self-reflexive cycle rich with lessons.

The Swale Trail:

I have been organizing large group work projects for nearly a decade. These involve between 10-50 participants all collaborating on the same common tasks. This work has been conducted in private workshops, community gardens and within the GELP. I am also a strong advocate for the value of visual communication and use this language intuitively.

While preparing for the first day of my Ecological Design I course, I found myself wanting a concise visual explanation of our tasks, work flow and group dynamics. After a quick conceptual sketch, I created this project plan. It is a concise explanation of how 30 students will all co-create a 50ft causeway through a muddy abandoned roadway. Please review the plan for the details of the day.

Prior to class I worked with 6-8 students to go over the specific tasks, location of tools and materials and general work flow. This plan was copied and handed out to 30 new students to be completed as their first lab session. We covered the basic process, then broke into teams and conducted the work. With the help of my volunteer leaders, we were able to accomplish all of this in the scheduled class time and demonstrated to the group their collective potential as a creative force of nature.

In terms of Sauvée’s Praxic Current, two different levels are at play. First, is the experience of the students. They simply placed into a collective experience where each one did the best they could. We reflected on the process at the end of the session and returned to space next week for a similar installation. Second, I have never used a document of this nature during a group work project. I simply thought it might help. The final result was an incredibly effective group process which now serves as a benchmark in my EE career. I am working to integrate this type of planning into all of my future collaborations and hope to normalize the plans as effective educational tools.
1.5 Teaching Foundations

Throughout this masters program a concise explanation of my particular approach to EE has been a useful tool. This approach can be summed up in three basic tenets; we are a part of the environment; our relationship can be mutually beneficial and the necessary work is interdisciplinary systems design.

We are part of the environment.

“The Death of Environmentalism” 3 describes the separation of humans and nature as a foundational concept which undermines the goals of the environmental movement.

…”As a community, environmentalists suffer from a bad case of group think, starting with shared assumptions about what we mean by “the environment” — a category that reinforces the notions that a) the environment is a separate “thing” and b) human beings are separate from and superior to the “natural world.”

Modern environmental discourse continues to enforce this separation, advocating for the study, preservation and protection of a separate “thing”. Standard practices in environmental education are also complicit. These activities often involve taking children and young adults to the remote wilderness to show them an “environment” fundamentally different than the one they live in every day. The intention is to create a meaningful connection to nature, thereby producing an ecologically conscious citizen. The unintended consequence may be that revealing the contrast between their urban or suburban existence and an unmeasured ecosystem reinforces the cultural mythology of our “otherness.”

Much attention is paid to understanding what types of activities create a human-nature connection. Flipping that question around would ask, “What activities contribute to the “natural world.”” Much attention is paid to understanding what types of activities create a human-nature connection. Flipping that question around would ask, “What activities contribute to the “natural world.”” Much attention is paid to understanding what types of activities create a human-nature connection. Flipping that question around would ask, “What activities contribute to the “natural world.”” Much attention is paid to understanding what types of activities create a human-nature connection. Flipping that question around would ask, “What activities contribute to the “natural world.”” Much attention is paid to understanding what types of activities create a human-nature connection. Flipping that question around would ask, “What activities contribute to the “natural world.””

Our Relationships can be Mutually Beneﬁcial.

This separation ideology is supported by a cultural dearth of productive and healthy human-nature connections. Many typical suggestions for good environmental stewardship amount to little more than consumer choices. Buying organic, buying local, buying Fair Trade, buying compact-ﬂuorescent bulbs, buying hybrid cars, and buying recycled products are the premiere recommendations for lowering one’s carbon footprint. Likewise, conserving water and saving energy are mere derivatives of buying and consuming less.

On the other side of the exchange is how we dispose of consumed goods. Beyond conventional garbage services, alternative choices for waste disposal are generally limited to recycling when appropriate, composting if it is available, no-ﬂush urinals and low-ﬂow toilets. Table 1.4 provides additional examples.

Our cultural narrative rarely empowers us with options to participate in the ecosystem. Stories of mutually beneﬁcial relationships between people and their landscapes are not widely known. Research into the subject quickly yields diverse accounts which are positive, practical and encouraging.

Farmers of Forty Centuries, by Hiram King 7 is an agronomist’s record of Chinese agriculture in the early twentieth century. His interests were in the cultural practices that have sustained the world’s largest populations since nearly 2000 BC. Their economy and prudent resourcefulness are humbling and inspiring.

Table 1.4

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<th>Sustainable Practices</th>
<th>Common Recommendations for Reducing your Ecological Footprint</th>
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<td>Disposal</td>
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<td>Recycle</td>
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<td>Compost</td>
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<td>Reduce Waste</td>
<td>Buy Fair Trade</td>
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<td>Go Paperless</td>
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The People of Cascadia, by Heidi Bohan 9 is another historical account of a culture living in symbiosis with their environment. Her work is a beautifully illustrated depiction of the material economies and seasonal behaviors of the First Nations of the Pacific Northwest. Douglas Deur’s article on “Kwakwaka’wakw Clam Gardens” 8 presents a more academic perspective on similar cultural practices.

Modern accounts of people as creative environmental agents are equally interesting, sophisticated and heartening. The permaculture movement, which is synonymous with my deﬁnition of ecological design is full of inspiring examples. My mentors, the Bullocks Family of Orcas Island Washington are a well known permaculturalists. By design, they have rehabilitated a 20-acre wetland over the course of 25 years. Their economy and prudent resourcefulness are humbling and inspiring.

The necessary work is Interdisciplinary Systems Design.

The separation ideology is rooted in our contemporary afﬁnity for reductionism. Understanding a whole via a thorough assessment of it’s individual components is certainly a useful process. However, without consideration of the original whole, there is a risk of not fully understanding the role of any individual part.

Systems thinking addresses the “whole” as well as its unique context. It is a valuable perspective which is under represented in contemporary higher education. Certain ﬁelds address systems thinking in the context of their own work, such as electrical or business systems, though few transcend the boundaries of the institutional disciplines. Indeed, the entire structure of our higher education is built around the unique, dis-integrated perspectives of highly specialized ﬁelds. Transcending these ﬁelds is a direct afﬁront to cultural expectations of specialization and expertise.

In order to create mutually beneﬁcial relationships in a system, or synergy, it is necessary to understand the existing components as well as the intrinsic properties which emerge from the part. Aying bee fodder with gray-water provides a simple example. In order to design the system, one needs to know building systems and the plumbing trade. Familiarity with insectary plants and their soil preferences is necessary for the biological aspects of the system. Finally, treating domestic gray-water on-site is often in violation of local building and/or health codes and so an awareness of the legal landscape is a must. This simple example emphasizes the need for holistic perspectives and collaborative design.

From an Environmental Studies perspective, these components involve individual people, communities, resources, biomes, infrastructure, cultural norms and the entire range of academic ﬁelds. Interdisciplinary systems design is therefore the medium for creating synergy in the context of human-nature relationships.
I remember crossing paths with Seth Vidiañia during my undergraduate studies. He was a graduate student, working to create an Office of Sustainability for WWU. He intensely developed the concept throughout his studies and following his graduation, was hired into the newly formed position of Campus Sustainability Manager. It struck me as a practical use of the graduate program and I set out to emulate his process.

**Integration**

My master plan is and has been the formation of a non-profit, student-run farm in the Outback Farm. It is the sole reason I entered this masters program. Every course, every project and every assignment would be in service of that ultimate goal. The process of integrating all of my work was relatively straightforward. Every assignment, regardless of its parameters had a predetermined focus and additional constraints. No course work was seen as separate from the larger mission and upon reflection the sum total of these projects is an impressive body of work. I am not sure if this list is necessarily comprehensive, but I think it is worth noting that every single project and assignment informed the next. This process was seen as an opportunity to explore and imbue the work with additional meaning. This one was from the beginning of my masters program:

> “Will it be delicious?” “Will I find what I am looking for?” “Am I good enough?”

Though intended as an early course to help students guide their studies, this course was running on its second offering of Ecological Design I - an alternative method for utilizing the space as a supplement to the master plan. This is what I like to think of as “Plan B”.

**Orientation**

I came to the program with nearly seven years of experience working in the field of permaculture design and education. This involved everything from teaching lessons on landscape drawing, to facilitating community garden installations. All of this took place outside of the context of the formalized field of Environmental Education. Reading works by Chambers**, Sauvé** and others provided the sum total of these projects informed the concept and content of the 501 materials, which were being created simultaneously.

**ENVS 588 Fall 2016 Assessment, Evaluation & Research in Environmental Education**

- I designed and conducted an assessment of administrative personnel with long-term relationships to the OELP. Their feedback was coded and quantified into a series of collective/ community goals for the space and program. This process informed the concept and content of the 501 materials, which were being created simultaneously.

**ENVS 595 Spring 2016 Ecological Design I**

- I ran the second version of the curriculum developed in ENVS 582. This course was hosted by Huxley College and listed as ENVS 397K, which is an experimental designation. Running a course a second time is a great opportunity to refine the individual lessons, the 10-week arc and the intensive logistics associated with hands-on experiential education. The refinements proved successful and I have continued to work with students from this class.

**ENVS 501 Fall 2016 Research and Projects in Environmental Studies**

- Though intended as an early course to help students guide their studies, this course was running on its second offering of Ecological Design I - an alternative method for utilizing the space as a supplement to the master plan. This is what I like to think of as “Plan B”.

**ENVS 587 Fall 2014 Conservation Psychology**

- I conducted a series of interviews with all seven of the previous AS Outback Student Coordinators. These discussions focused on the pros and cons of student leadership, from their first-hand experience. We also discussed the Outback’s contributions to student well-being and personal development. This research provided valuable insights into the history of the space and its associated programs which certainly informed future conceptual development.

**ENVS 582 Winter 2015 Curriculum in Environmental Education**

- This course provided an opportunity to design and develop a 10-week curriculum for a course I titled Ecological Design I. The facilitated development allowed me to integrate my foundations, as well as previous professional work into a unique teaching and learning experience. The curriculum focused on systems thinking, design process, sustainability concepts and basic hands-on techniques and practices in ecological design.

**ENVS 500 Winter 2015 Assessing the Outback**

- This self-directed independent study provided a platform for researching the long and interesting history of the Outback. I also conducted my investigations into current programming associated with the OELP. This was the first instance that I used the workshop series through the Outback. Much of this material was familiar, though it was a good exercise in course administration and the resources and processes available at the university. A secondary goal of this course was to generate interest in the second offering of Ecological Design I to be held in the spring of 2016.

**ENVS 590 Fall 2016 Urban Agriculture Workshop Facilitation**

- For this independent study, I designed and ran a three-part "Introduction to Permaculture" workshop series through the Outback. Much of this material was familiar, though it was a good exercise in course administration and the resources and processes available at the university. A secondary goal of this course was to generate interest in the second offering of Ecological Design I to be held in the spring of 2016.

**ENVS 595 Summer 2015 Teaching Practicum**

- I co-facilitated a 2-week, 72-hour Permaculture Design Course (PDC) with instructor Dave Boehnlein and Alderleaf Wilderness College. We had 22 students from all over North America.

**ENVS 501 Fall 2016 Research and Projects in Environmental Studies**

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2.3 The Middle

This year involved extensive administrative “research”. Though this work was not explicitly credited, it was a necessary process for understanding how to develop the position. A scheduling conflict slowed down my overall project. However, the slower pace allowed time for a more proactive administrative strategy.

Contextualization

A small group meeting during the fall of 2015 loosely resembled the Outback Governing Council, which serves as an advisory board for the OELP. Mitinative work was both associated Student Outback Coordinators, two college Dean’s and an Outback alumni/potential community partner. In advance of this meeting I developed a “decision package” as a concise budgetary proposal for the position. The meeting confirmed that everyone at the table saw a staff position as a critical step for moving forward. This felt like progress, however the institutional context was about to come clear. Following this initial collaboration… nothing happened. The group was unable to schedule another meeting for weeks and then months. People were busy and though this position seemed like a good idea, it could not be prioritized. I pursued individual conversations with the college deans in an effort to better understand the impedances. As with most projects, the issues were administrative and financial.

The Outback serves a wide audience and is integrated into a number of different programs in the University. Details of these relationships are outlined in section 5.3. During my second year, a number of things became clear regarding management of the site and program. First, decision making responsibilities are diffused across a broad range of stakeholders. Second, all of these stake holders are preoccupied with other responsibilities, making the OELP a small fraction of their scope of work. Third, the rapid turnover of the primary stakeholders, the AS Student Coordinators, is out of sync with the working time frame of the institution. This was my first-hand experience with the problem I had come to address. Without a consistent point-person primarily responsible for the representation of the OELP within the University, there was no clear channel for programmatic development. The proposed position addresses all three of these issues, however its absence serves as the primary impedance to its conception; a chicken and an egg.

Though I did not find Fields of Learning until 2016, Laura Sayre12 concludes in her comparative evaluation of 15 higher-education students farms: “… student farms seem frequently to have gotten started thanks in large part to the persistent efforts of a single, dynamic individual with a vision of how a student farm could fit into their campus community.”

Though the Outback is a long-standing element of the WWU campus, it’s programmatic structure is hindered in its own maturation and my personal project may be instrumental in the transition to a more effective educational resource.

Development

During the fall of 2016 I was enrolled in both ENVS 501 Research and Projects in Environmental Studies and ENVS 588 Assessment, Evaluation & Research in Environmental Education. Each course focused on a primary project and I integrated them both into my larger master plan.

The 501 project has been designed to facilitate the thesis development process for masters candidates in the environmental studies program. My work was in the “project” category and the course facilitated my normalization of the Outback Manager Position proposal.

The previous years administrative issues only reinforced the need for such a position. However the financial impediments remain. Given the disparate stakeholders in the OELP, no one group would benefit directly enough to warrant the expense of a new position. The AS already supports three student coordinators. Fairhaven is providing an operating budget and capital for large site developments. The limited involvement of all the other stake holders is not promising for substantial financial support.

Another key funding issue is a well-known programmatic trap associated with developing new positions. Given that funding is an obvious resource, however using grant funding to pay salaries is a major red-flag. Proposals without long-term funding models included are less-appealing because of the potential dependence upon on-going grant support to maintain key personnel.

With this in mind, I used the 501 project to develop a distributed support system which would generate a vested interest in a range of stakeholders. This strategy involves dividing costs via a tiered sponsorship structure for primary, secondary and tertiary OELP stakeholders. At the time, this represented a potential and practical long-term funding model. Outlining this structure and finding conditional support from primary stakeholders became a primary focus.

For my 588 project, I conducted a more refined assessment of the Outback and its associated programming. This was represented as a Logic Model, which is often a graphic representation of a programs context, inputs and outputs. Logic models are a tool used by funders, managers, and evaluators to assess the effectiveness of a program. The Outback Logic Model can be seen in section 5.3.

Following the development of the Logic model I conducted a series of loosely structured narrative interviews with administrative personnel who have had long-term relationships to the OELP. The major takeaways from this assessment were the collective perceptions of the Outback as a singular and unique experiential learning space; as a resource to the Bellingham community and the distinct need for clear programmatic goals, organizational structure and staff support.

Implementation

The simultaneous creation of these two projects facilitated a direct integration of their concepts and content. Using personal research and experiences, I began soliciting support for my plan in earnest during the spring of 2017, only to be diverted down another unanticipated funding route. Somewhere between this committee recommending to that committee which oversees this office who advises on this budget which may be integrated into an appeal to Olympia, a budget proposal is moving forward. In parallel, Kamea Black and I have submitted a proposal to the Sustainable Action Fund, which uses student fees to promote sustainability on campus. Each proposal covers the cost of an initial pilot position for 2 and 3 years, respectively. Each has been well received and we are awaiting the results.
Section 3.1 The Outback

After years of experience in similar educational spaces, I have a strong emotional reaction to the layers of student projects that cover the 5-acre Outback Farm. The great sense of hope and wonder is met with an equal sensation of anxiety and sadness. The untapped lessons of this educational landscape can be deafening at times.

History

The landscape of the Outback Garden embodies a rich history, dating back far beyond colonization. The land itself is within the territory of the Straits Salish Peoples, specifically the Lummi and/or Nooksack Nations. Following the displacement of the Indigenous people, the landscape was logged a number of times throughout the nineteenth century. In the 1850’s it was the initial mining site for the Bellingham Bay Coal Company. June and Farrar Burns homesteaded on the site during the early twentieth century (1935-1939). Their original cabin still stands and was renovated by the WWU Physical Plant in 2006. The entirety of Sehome Hill was turned into a city park in 1922 and into the Sehome Arboretum in 1967. The expanding campus of Western Washington University ultimately encompassed the land, and in 1972 the Outback Farm began.

Since its inception the Outback has been a primarily student-led experiential learning site, focused on agriculture, human ecology and sustainability. It has included pigs, goats, ponds, a barn, and various alternative energy systems.

In recent years, the Outback has been adopted by the Associated Students of WWU. Since 2007, the AS has supported a half-time student coordinator to manage the various responsibilities of the landscape and associated programs. In that time the site has seen considerable development including the formation of a Community Garden, a Market Garden, a Forest Garden and various ethnobotanical plantings. Construction projects have included an amphitheater, a substantial greenhouse and a beautiful outdoor classroom. These most recent developments seem to have coincided with a recent resurgence of interest in sustainable agricultrue.

The “Good Food Movement”, to borrow a term from the famous urban farmer, Will Allen, is thriving today in the form of young farmers, local markets and school gardens. Food is an obvious bridge into human relationships with the environment and growing food may serve as a simple accessible means of engaging citizens in environmental stewardship. As an interactive garden/park the Outback functions as a bridge between wild and managed nature. It is an urban agricultural laboratory where motivated students can explore their connection to the environment, personally design a small piece of earth and ultimately develop long lasting perspectives that support whole healthy persons.

Campus Farms

Published in 2011, Fields of Learning 12 is an effort to contextualize the Student Farm movement in American Higher Education. The collection represents evaluations of 15 campus farms from across North America. The Outback Farm fits into this movement of ~100 unique student farms in higher-ed institutions and is indeed mentioned in the book. These farms represent an invaluable resource for profound, place-based, interdisciplinary education.

In their assessment of campus farms, Sayre and Clark outline a range of themes that provide both challenges and opportunities to programs of this nature. A primary concern is the difference between student versus faculty/staff management. A common pattern in the development of these sites and programs is the transition from chaotic student-led development period into a mature, fixed form of staff management. The OELP has been in this liminal space for nearly ten years. Students and administration alike have made a range of efforts to transition from a student-led program. The TAP analysis conducted by the AS in 2010, an appeal to the AS by the Outback Coordinator in 2012, a SPAC assessment by the AS in 2014 have all surmised that the most critical need for the OELP is long-term staff involvement 13, 14, 15, 16.

Fields of Learning 17 offers a range of anecdotal insights regarding the development and management of place-based, experiential learning programs. The conclusion of the book provides a set of 10 steps for the development of a robust and meaningful academic resource. These ten steps have been a valuable example for the methods of this paper. Some of them have already been accomplished (Step 3: “Hunt for Land”, Step 4: “Know the Context”). Others are explicitly addressed (Step 2: “Identify Allies”, Step 5: “Seek Funding”, Step 11: “Cultivate partners and supporters beyond campus”).

3.2 Site Assessment

As a landscape designer, I spend a lot of time assessing land for its growing potential. I survey sites, produce maps and write reports for both domestic and international clients. In my professional opinion the Outback is an outstanding piece of real-estate. It is an elevated, sheltered, south-facing valley with a perennial stream, city water, a healthy ecology, and unlimited project potential.

Design Projects:

Initially, I wrestled with the notion of using my professional design experience to create an official master plan for the Outback Experiential Learning Program. Through alluring at first, I decided against it for a handful of reasons. If I designed it, the plan would be perceived as mine. There is a deep rooted sense of communal ownership in the Outback campus and the prospect of some know-it-all student hi-jacking the space seemed like a threat to the legacy of the program. Likewise, just because a plan has been made, does not mean it will be created. Had I spent a year or two developing an in-depth master plan with detailed explanations of the site and systems, there is no guarantee that it would ever manifest. Indeed, without a staff position to guide the project through the years, it would likely suffer the fate of so many other well intentioned student contributions.

Instead, the order of operations became; make a position to facilitate development across multiple years. Then use that long-term planning capacity to co-create a master plan in collaboration with all of the various stakeholders. Through this process, many folks would feel ownership over the vision and with the help of a consistent Outback Manager could participate in it’s implementation through a diversity of channels. Without a comprehensive master plan for the site, excessive development runs the risk of precluding future opportunities. With that in mind, I have worked with students to develop some simple improvements to the overall landscape.

An early project was improving access to the Forest Garden. This space was developed as a perennial polyculture by Karl Wolschlagler and Nick Spring in 2008. It was planted with fruit trees, berry bushes and a collection of edible species. It has since evolved in spite of the windy, narrow, uneven pathway in. My students created a ~150’ walkway over a mucky abandoned road. We created seasonal ponds and planted the space with shade tolerant edible species. We have also installed an outdoor kitchen, 500 gallons of rainwater collection, a lumber rack, a covered workbench and a whimsical entry arbor. These were all simple upgrades to existing infrastructure, working towards a more functional and legible whole.
3.3 The Base Map

This map was produced in collaboration with a student who was interested in cartographic skills. It was printed and laminated and has served as a handy tool for orienting students within the educational landscape.
Section 4.1 Teaching

The Outback Management curriculum is explicitly and intentionally not a faculty position. Even still, teaching is and has always been the primary goal. Throughout my masters program, I was employed as an instructor at WWU and as a student, created further opportunities for teaching the material I am so interested and passionate about.

Enabling Autodidactic Designers

As an instructor, my primary goal is to no longer be needed by my students. I can clearly remember one of my best days as a teacher. It was possible through my course on account of the space-time vortex at the hardware store. The class was already buzzing with activity when I arrived at the Outback Farm. Students were building gates, planting shrubs, preparing garden beds and improving their plumbing. It was the second iteration of the Ecological Design I course that I taught through Fairhaven and Huxley College. After checking in with each student team and answering a few small questions I realized that my students no longer needed my guidance and they were now comfortable working and learning on their own. Without the need for my facilitation, I simply grabbed a wheel barrow and started working alongside them. To me, this memory is an excellent example of students actively applying the basic concepts of sustainability through tangible and meaningful, student-centered projects.

Learning how to teach myself was the most prominent lesson from my apprenticeship at the Bullocks Homestead. We were constantly encouraged to engage with a variety of media. There was an extensive library of all types of books and resources and no shortage of projects. Plants needed care. Machines needed repair. And improvements to existing systems were always necessary to engage with and improve those systems; and, much of this is cached inside of the constructionist learning model which advocates student centered, discovery learning. During these processes students use existing mental models and understanding to acquire more knowledge. Place-based, design-focused experiential learning offers a lot of potential for facilitating these connections. The existing mental models are often as simple as looking at some plants, or handling a simple tool. The landscape of the Outback embodies many key concepts such as watersheds, microclimates and biomes. Facilitated participation in these systems via simple tasks such as digging, weeding and planting provides easily accessible points of connection between existing mental frame works, the physical environment and novel theories and concepts. Nesting all of this inside of a transparent education curriculum encourages self-aware, self-motivated integration of theory and practice via direct participation in our shared environment.

Over the years, my students have enjoyed a hands-on, boots-on, inter-disciplinary approach to understanding their personal role inside of their local ecosystem. I have watched this pedagogy reveal empowering new understandings of key issues regarding social and environmental justice. The focus of my teaching is to ground my students’ conceptual understanding into real world systems; teach them the skills necessary to engage with and improve those systems; and, to develop the sense of agency that is needed to become an active, innovative citizen with a healthy relationship to their culture and environment.

Ecological Design I: In line with my strategy for integrating projects across my masters programs, I developed an opportunity to teach the curriculum I had designed in ENVS 582. Implementing the curriculum dramatically improved the value of an otherwise theoretical exercise. The first iteration of Ecological Design I was through an administrative hand-off that I orchestrated with Dr. John Tuftill of Fairhaven College. The course was well received by the 25 enrolled students whose end-of-quarter feedback consistently referenced expanded skills and improved confidence. The second iteration was refined in a few ways: I had included four teachers assistants who I worked with prior to class to prep for projects. The second iteration did not have this cohort of support. I was able to create a similar community within the student group, but it was much more effective to integrate it from the start. Re-fonements to the narrative also changed the course. These were minor additions including new readings and presentations. I have learned over the years that small seeds planted in the beginning of a course can have a marked impact on student perceptions 6-7 week later. This course was also deemed successful and its conclusion, a small group of students took on the development of a student club in order to maintain the practice of the learning community the course had generated.

The third iteration is still in progress. Remarkable support from two co-teachers has made this experience dramatically a better than the previous two. The course is also much larger, ~40 students, which certainly affects both the student and teacher experience, in this case not favorably. The narrative has also been refined and is taking form as a salient and empowering message for young adults. The experimental status allows for a third iteration of 397K. My hope is to polish this into a meaningful learning experience for the Fairhaven and Huxley College deem valuable enough to continue offering.
Section 5.1 Administration

The administrative assessment of the Outback that I conducted during the fall of 2016 provided a number of valuable insights. Two particular issues embodied self-perpetuating circular logic; first, the vague goals were too easily met, which qualified the program as a perpetual underwhelming success; and second, the lack of structured management was impeding the formation of structured management.

Context

Administrative tasks are often labeled a necessary evil. I approached this project with that typical mindset, yet over the past three years I have learned that these can be a creative process like any other. And, as with most skill sets, it gets easier with practice.

The unique nature of the Outback makes the administrative work particularly crucial as well as challenging. Laura Sayre explains this relationship well during her intro to Fields of Learning:

“(Student Farms) are absolutely unique: liminal spaces on the border between community and institution that are relatively insulated from the market, powered by the energy and enthusiasm of twenty-somethings, and enriched by the intellectual resources of academia.”

The Outback embodies all of this. The Community Garden offers plots to over 30 neighborhood residents who are seeking a place to cultivate. The Educational Garden provides students the space and resources to learn through hands-on agricultural processes. Their produce is not sold, but generally lasts for one or two years. Interviews I conducted with the former AS Coordinators thematically claimed that administrative work was overwhelming and keeping them from the hands-on experiences in the landscape, which was often the reason they applied in the first place. These themes also showed up during the interviews I conducted with key Outback administrators.

Pursuing the formation of an Outback Specialist has certainly involved nearly three years of administrative problem solving. It began with semi-formal appeals to two different colleges. These were appreciated in their intent, but neither was approved. The next version was an intricate arrangement of distributed funding, outlined in section 6.2. This holds the greatest potential for long-term funding, however it has been placed on hold in favor of the third and current effort. This involves both an application to the Sustainable Action Fund as well as a one-time budget request to the office of the provost. Each of these models has required a fair degree of legwork, meetings, research and correspondence and I believe the necessary work has far exceeded the capacity of a part-time, undergraduate student coordinator.

A major responsibility of the Outback Specialist position will likely involve this administrative work. Budget access has always been a challenge for student coordinators. A small discretionary budget for the position will streamline the wide range of small purchases necessary for this site of nature. As I mentioned before, this all gets easier with practice. A long-term staff position will have the scope necessary for developing additional administrative tools for tracking purchases, student use of the space, for collaborating with community partners and facilitating academic involvement. Ideally, this role provides students with resident employees, so that they might learn within an existing framework, instead of continually reinventing/discovering these processes. And, if it is well facilitated, they may even come to enjoy this necessary evil.

During my integration of learning and teaching, I found myself doing a large volume of administrative work. I organized, publicized, and registered students for my first two iterations of Ecological Design I. Each of the three classes has involved a 3-day field trip to Orcas Island, including van rentals, ferry purchases, student use of the space, for collaborating with community partners and facilitating academic involvement. When managed well, these systems maintain a smooth flow of information, resources and responsibilities and thereby enable a safe and seamless learning experience.

The production of the Logic Model, presented in section 5.3, provided a macro-view of the Outback as a system. The context, inputs, outputs and goals were all clearly displayed in relation to each other. A small bit of research revealed an aggregate program budget of nearly $50,000 per annum. This analysis addressed three different time-frames for the anticipated outcomes; quarterly, year-to-year and multi-year. When viewed from the quarter-to-quarter short-term perspective, the OELP provides a range of learning opportunities. It continually attracts a community of students interested and involved in the site and programming. Likewise, from the long-term perspective, the OELP continues to operate and develop student run programs. The year-to-year term goals present a different picture. A negative feedback loop severely limits programmatic development. A distinct lack of institutional memory as well as accessible administrative resources and responsibilities leaves student leadership consistently under informed and overwhelmed. This cycle has led to a degree of stagnation where the program is indeed meeting its list but it is not continually maturing into a more refined resource over the scope of 3, 5 or 10 years.

Changes within an institutional scale take far longer than the duration of typical student involvement which generally lasts for one or two years. Interviews I conducted with the former AS Coordinators thematically claimed that administrative work was overwhelming and keeping them from the hands-on experiences in the landscape, which was often the reason they applied in the first place. These themes also showed up during the interviews I conducted with key Outback administrators.

5.2 Budgeting

There is a persistent perception in our culture that ecologically responsible choices are a luxury only accessible to populations with the necessary means. This perspective is disenfranchising and counter productive. Instead of solutions that few people can do with thousands of dollars, I prefer solutions that thousands of people can achieve with just a few dollars.

Resourceful Design:

Throughout my work in the Outback I strove to embody a resourceful perspective. Though the Outback has a small operating budget, I worked very hard to accomplish projects without accessing the limited resources of the student program. Likewise, finding alternative mechanisms for financial support involved extensive institutional paperwork so the financial strategy became, “make do with what we have”. This type of limitation can be restrictive, or it can be an earnest example of real-world problem solving. During my administrative interview, John Tuxill offered a really compelling perception of the Outback Farm:

“The rest of the University is largely planned and reflects a large bureaucratic institution. The Outback is different. It is organic, bit ramshackle. It runs on a tight budget. But those are limitations that many people in their day-to-day lives are forced to live with that are not reflected in the rest of the University.”

I appreciated this perspective and it strongly reflected my experience working within the space. During my first large group project, outlined in section 1.4, we created over 50 linear feet of improved trail, three ephemeral ponds, improved access to the forest garden, provided hands-on learning experiences for ~25 students, planted locally appropriate species and spent less than $10 on a single 16 foot length of drain-pipe.

There exists a vast resource network in and around Bellingham. With the stupendous generosity of Richard Neyer, we borrowed a truck from the WWU Recycling Center to collect materials from the abundance of the urban waste stream. Student projects have incorporated dozens of yards of free manure (fertility), free wood chips, truckloads of cardboard (biodegradable waste barrier), free seeds (Bellingham Food Bank), free starts (Joe’s Gardens, free plant material (WWU Gardeners), mushroom spawn, lumber, large woody debris, tools, gray water infiltrators, rain water collection tanks, bike powered pumps and more. Programmatic development certainly requires financial capital. The attached tool list was a collaboration with Lily Morgan, the 2016 Student Coordinator and was fulfilled using the Outback’s budget to improve the Outback’s capacity. However, many of the most authentic examples of appropriate technology are simple systems that are intrinsically low budget. Exposure to these types of solutions provide students with practical examples which may be adapted to their own lives or scaled up into future professional projects.
### 5.3 The Logic Model

The logic model was one of many different programmatic assessment templates available. It is a practical format and its creation yielded a number of insights. Specifically, the extent of the budget, which amounts to approximately $50,000 per annum.

#### OUTBACK EXPERIENTIAL LEARNING PROGRAM (OELP)

#### LOGIC MODEL

| CONTEXT: | The Outback Experiential Learning Program is a student run 5-acre farm on the campus of Western Washington University. The site and associated programming provides learning opportunities in sustainable land-care for Western students and the wider community. This model represents an effort to better understand the effectiveness of the OELP Program. |
| SITUATION: | Founded in 1970’s as student led organic farm. -Operates as such for ~25 years. -Threatened by development in early 2000’s. -Defended and designated as Educational Space in WWU Master Plan. -Incorporated into Associated Students Programming (to attach full Student Staff Position, aka the Recycle Center) |
| PRIORITIES: | -Student Run/Student Centered. -Providing experiential learning opportunities for students. -Students learn about, develop and participate in WWU Master Educational Space -Defended and designated as 2000’s -Operates as such for ~25 years. -Organic farm. |
| SOFT ASSETS: | -Stream (Storm-water/ Burns Creek Flow) -Green Houses -Tool Shed & Tools -Class Room -5 Acres of WWU Campus Real Estate -Ongoing Infrastructure Development -Hosting Bees -Hosting Events -Hosting Community Garden -Hosting Classes/Class Tours -Hosting Community Gardens -Hosting Summer Camp (CTF) -Hosting Service Learning (LEAD) -Hosting Independent Study Projects -Hosting Workshops Attendees -ISP Participants -OELP Community -Small Land-based Community -Limited WWU Partners -Occasional IFH Partners -Students Programming. -Incorporated into Associated Students Programming (to attain Non-Student Staff Position, aka the Recycle Center.) |
| BUDGET: | -$5600 Fairhaven Annual Budget -$9200 AS Outback Manager Salary -$8614 AS Assistant Manager Salary -$8601 AS Forest Garden Mgr-Salary -$2850 Work Study Students x 8 Positions -$52,475 Annual Operating Costs + One Time Capital Investments (E.g. -$35,000 2015 fence Install) |

#### INPUTS:

**SOFT ASSETS:**

- Student Run/Student Centered.
- Providing experiential learning opportunities for students.
- Students learn about, develop and implement sustainable land-use practices.
- The OELP also provides job-related skill building and community networking opportunities for students.

#### ACTIVITIES:

**PRINCIPAL:**

- Students learn about, develop and participate in WWU Master Educational Space -Defended and designated as 2000’s -Operates as such for ~25 years. -Organic farm.
- Incorporating into Associated Students Programming (to attain Non-Student Staff Position, aka the Recycle Center.)

#### STRENGTHS:

**SITUATION:**

- Founded in 1970’s as student led organic farm.
- Operates as such for ~25 years.
- Threatened by development in early 2000’s.
- Defended and designated as Educational Space in WWU Master Plan.
- Incorporated into Associated Students Programming (to attach full Student Staff Position, aka the Recycle Center.)

#### CHALLENGES:

**OUTBACK EXPERIENTIAL LEARNING PROGRAM (OELP)**

**LOGIC MODEL**

**SITUATION:**

- Founded in 1970’s as student led organic farm.
- Operates as such for ~25 years.
- Threatened by development in early 2000’s.
- Defended and designated as Educational Space in WWU Master Plan.
- Incorporated into Associated Students Programming (to attain Non-Student Staff Position, aka the Recycle Center.)

**PRIORITIES:**

- Student Run/Student Centered.
- Providing experiential learning opportunities for students.
- Students learn about, develop and implement sustainable land-use practices.
- The OELP also provides job-related skill building and community networking opportunities for students.

**BUDGET:**

- $5600 Fairhaven Annual Budget
- $9200 AS Outback Manager Salary
- $8614 AS Assistant Manager Salary
- $8601 AS Forest Garden Mgr-Salary
- $2850 Work Study Students x 8 Positions
- $52,475 Annual Operating Costs + One Time Capital Investments (E.g. -$35,000 2015 fence Install)

**PLANTS:**

- Seeds & Starts
- Manures
- Consumables (Row cover, straw, etc.)

**WATER:**

- Irrigation (~35,000 Gallons per Month)
- Stream (Storm-water/ Burns Creek Flow)

**INFRASSTRUCTURE & ACCESS:**

- 5 Acres of WWU Campus Real Estate
- Class Room
- Tool Shed & Tools
- Community Garden Beds
- Green Houses
- Amphitheater
- Fencing
- Burns Laban (Historical Building)

**PLANTS:**

- Educational Garden Produce (1750 Bushel/year)
- Community Garden Produce (~50 Plots)

**WATER:**

- Stream (Outflow + Irrigation Runoff)

**INFRASSTRUCTURE & ACCESS:**

- Ongoing Infrastructure Development (E.g. Amphitheater, Classroom, Fencing, Greenhouse, etc.)

#### STRATEGIES:

**CONCLUSION:**

In its current pattern of operation, the OELP is currently meeting its stated goals. From the quarter-to-quarter Short-Term perspective, the OELP provides a range of learning opportunities. The Outback continually attracts a community of students interested and involved in the site and programming.

From the multi-year Long-Term perspective, the OELP continues to operate and develop according to student determined needs and capacities.

The year-to-year Mid-Term goals are impeded by a Negative Feedback Loop. The quick turn-over of the primary program coordinator (AS Position) is a well recognized limit on year-to-year continuity and the development of the site and programming.

Financially, the OELP is not designed to produce earnings. The annual budget of ~$50,000 per year represents a minor expense in the scope of WWU. The AS and Fairhaven College. However, compounded over the long term operation of the program these expenses gain significance.

Development of the site and program are severely limited by the lack of Institutional Memory, Strategic Plan and long-term non-student staff position of Outback Manager.
Section 6.1 The Position

The formation of this position was the original intent of my entire masters pursuit. During the beginning of this endeavor, I struggled a lot with the concept of the means and the ends. Reflecting on the means thus far, I have indeed learned far more than I had anticipated. And I feel confident that I will walk away with some element of my original vision in the end.

Purpose

Based on the recommendations presented in previous assessments of the Outback, as well as the observed success of other university farms, this work is advocating for the creation of a 3-year Pilot of a half-time, non-student Specialist position for the Outback Experiential Learning Program.

The specialist designation is in anticipation of a diverse and unique set of responsibilities, including but not limited to repairing irrigation systems, diagnosing plant pathologies, collaborating with faculty and community partners and working with a team of 8-12 student employees.

The half-time designation reflects an economy of scale. A skilled specialist providing effective facilitation and technical support could streamline the existing student staff and budget to meet the demands of the 5-acre landscape and programs. Beyond the focused administrative and technical responsibilities, the most effective additional work would be building capacity as an instructor by recruiting and training existing student employees.

This three-year study would serve as a proof of concept for the following:

- Developing effective facilitation and technical support.
- Facilitating the ongoing meetings of the Outback governing council.
- Improving maintenance and “curb-appeal”.
- Facilitating organizational partnerships.
- Increasing community use of the Outback.
- Exploring long-term academic involvement.
- Increasing academic use of the Outback.
- Increasing student participation in the Outback.
- Increasing student awareness of the Outback.
- Facilitating place-based experiential education.
- Increasing academic use of the Outback.

Over the past 3 years, traditional sources for funding have been thoroughly explored. Members of Fairhaven’s faculty and administration developed a budget proposal and presented it to the state legislature, where it was denied. A smaller proposal was developed and presented as an urgent budgetary item for WWU provost’s office, where it was also denied. A primary goal throughout my process was to provide an annual salary of ~$50,000 for the Outback position. Their collective total covers ~$2,000 for the major overhead costs. The strategy has been prioritized as it represents the most effective initial support structure for the Outback.

Support

Piloting the initial 3-year trial is a practical investment for a number of reasons. The Outback is a small-scale demonstration site and with professional facilitation it could host a variety of sustainability projects both large and small. These opportunities would reach many students as well as the Bellingham community. This non-student position will dramatically improve the performance of an existing campus sustainability resource, promoting a broader reach for the Outback as well as deeper, more sophisticated connections between students and the space.

After clarifying the need and outlining the goals and responsibilities of the position, securing financial support will be the next critical step. The Sustainable Action Fund application, and the one-time budget request are designed to cover a 2-3 year pilot. Developing structure for on-going support will be a primary goal of the pilot position if the position proves valuable.

Similar positions on campus, such as program specialists and instructional/classroom support technicians, generally receive an annual salary of ~$50,000. As stated in section 6.1, the specific strategy at the Outback is not for a full-time employee (FTE). Given the nature of the site and the associated programming a half time employee (.5FTE) would be the most effective staffing arrangement. Beyond half time, an NTT instructor contract would facilitate scale student training and thereby build programmatic capacity. The manager would be providing administrative and technical support for the extant student positions. Faculty would facilitate any additional academic development and/or use of the position.

6.2 The Potential

Throughout this process, I explored the various mechanisms within Western Washington Universities institutional machine. Again, learning through doing led me to the results presented below. It is understood that this is an unconventional funding structure. But if it weren’t a scrappy and unique student-led effort, it wouldn’t really fit the Outback.

Tiered Sponsorship

This strategy has been prioritized as it represents the most likely long-term model for support. The Outback currently serves a wide audience and is managed by a diverse team. It is important for the college to find a position that serves so many others. Instead, by distributing funding across three tiers of stakeholders, the contributions will be directly related to the degree of involvement of each supporting entity. This concept represents the most feasible strategy for long-term support, as no stakeholder bears the entire burden.

The First Tier (~$8,000 per year)

- Fairhaven College- (Manages & Develops Site)
- The Associated Students- (Manages Staff & Programming)
- Huxley College- (Peripheral Academic Involvement)
- Facilities- (Maintains surrounding grounds, assists with infrastructure developments)

Each of the primary stakeholders contributes ~$8,000 towards the Outback position. Their collective totals cover ~$32,000 the majority, over 80%, of the annual salary and estimated payroll burden.

The Second Tier (~$3,000 per year)

- University Residences- (Outback is surrounded by 1360 dorm students)
- Student Employment Office- (Supports ~ 8 work-study positions)
- Dining Services- (Promotion of Real Food Challenge on campus)
- Faculty (Peripheral Academic Involvement)

These three groups would contribute $3,000 each towards the cost of the position to improve the site and programming as it relates to their existing responsibilities. Their collective contribution would be ~$9,000, nearly 30% of the annual salary (minus payroll burden).

The Third Tier (~$1,000 per year)

- The Office of Environmental Health & Safety- (Risk Management)
- Biology Department- (~200 Student Labs per quarter)
- Facilities (Peripheral Academic Involvement)

These two groups would contribute $1,000 annually towards the cost of the position to improve the site and programming as it relates to their existing responsibilities. Their collective contribution would be ~$2,000, or 6% of the annual salary (minus payroll burden).

A distributed support system generates a vested interest in a range of stakeholders. A matched funding system helps to overcome the initial start up costs. And the current human resources available for this effort present a unique opportunity in the long and interesting history of the Outback.
In my pursuit of teaching environmental ed, my path was divided and I have followed both routes in parallel. One focus has been the development of a long-term staff position within the OELP. The other has been the development of a unique Ecological Design curriculum. Both have provided valuable professional experience and my aim now is to unify the two into a synergistic whole.

Challenges

Obviously challenges were expected in this process. They are an integral part of the educational process. As such it becomes difficult to separate the individual struggles from their associated successes and failures.

Some of my challenges had to do with my unique relationship with the entire program. I entered the campus-based track on a three-year trajectory. This kept me outside of the three separate student cohorts which I created by my studies and led to some feelings of isolation. Though I had many fine peers, it was difficult to integrate into an on-going learning community with peers are a great platform for exploring course material outside of the facilitated classroom context. I wanted to continue compelling discussions beyond our scheduled time, but given our different and very busy schedules, these were often left unresolved.

Layering in my unique edible landscaping approach also contributed to a self-blamed identity. Though my peers and instructors valued this perspective, few had fully internalized the many ideas. I spend a lot of time describing the context of permaculture courses and permaculture communities (This perspective was included in The Teaching Foundations I outlined in section 1.5). Indeed, much of that material was distilled from my permaculture teaching experience. Conversations in that context are all building upon a mutual understanding which did not have a strong presence in the in the campus setting. I often felt compelled to adopt my teacher role during class conversations, but resisted the instinct to do so.

This lead to another type of frustration throughout my studies. I often felt that the conversation was not being pushed far enough; to be clear, not being pushed far enough in my preferred direction, I felt singular in my belief that we can directly improve our daily ecology. I felt incredulous while reading books and articles that clearly lacked creative and positive solutions. It was challenging and required an intentional effort not to instinctively walk the class out to the Outback, tool-up and start educating ourselves on, and through, positive changes in our immediate environment. This is all contains strong elements of egoism and after intentional personal reflection it provided substantive lessons regarding my particular orientation to the subject matter. Checking these egoic thoughts will certainly make me a better teacher and educational leader. Indeed, the shallowness of these frustrations which were focused into the development and delivery of my Ecological Design classes.

Meaning

One of my primary goals as an educator is to make meaningful learning experiences. There has been a lot of substantive work over the past three years which has provided me with genuine lessons regarding my relationship to my environment, my relationship to my students and my facilitation of their relationship to their own environments. But what does that mean in a bigger context? How can this work contribute to the greater good? Ecological Design differs from other design practices on account of it’s ethical foundations. These reflect the most common ethical concepts used in contemporary sustainability statements and as many of whom have summed up a broad and contentious field. The ethical frame work I teach consists of:

- Care of the Planet
- Care of People and;
- A Careful Process.

Care of the Planet

This ethic obviously underlies the entirety of environmental education. Even still, there are many different interpretations. The majority of our required reading materials provided throughout the five courses of this masters program were still mired in the language of “doing less bad.” This language only reinforces the separation ideology and lacks creative, proactive participation. This perception was shared by many students within my department. Direct feedback from my own students feedback while I was still being studied within Huxley College for 2-4 years, frequently confirmed that this defeatist language permeates the majority of environmental discourse within the institution. After 4 years, this disheartening rhetoric takes its toll on the enthusiasm and inspiration of future environmental leaders. I understand that comments such as these require substantiation through a meta-study coding the most popular articles assigned environmental programs in higher-education, systematically quantifying each authors qualitative perspective. This would warrant an entire masters thesis unto itself.

The most salient piece here is that the concept of mutually-beneficial human-nature relationships needs more representation in our current cultural discourse regarding the environment. We need more examples of humans creating and maintaining these relationships, both historically and within our contemporary context. And, we need more working professionals within the fields of environmental science and environmental studies, who have had first-hand experience with these intellectual paradigms who will be directing research, informing policy and monitoring the results. Without exposure to the positive potential of human culture, they will simply be working to slow our inevitable self destruction. Place-based experiential education is a critical tool for introducing these positive productive world-views to adults. David Drappers outlines this potential in his writings on experiential education in higher ed:

“Experiential education moves more focus from the subject matter to the learner, with more equal contributions to the learning process from the educator as well as the students. Students enjoy a more relevant curriculum, as well as cognitive and affective gains beyond traditional classroom lectures.”

Grounding their academic work in first-hand experiences will give them valuable insights into how these concepts can be scaled up and adapted to professional practices. And finally, these experiences go beyond the concept of simply understanding the environment and create meaningful connections to the systems that we are so intimately dependent on.

Composting provides a great example. It is an easy idea to support and many municipalities are developing citywide composting services. Indeed, Seattle and Portland have both mandated residential composting within the last 5 years. The policy-makers and system-designers responsible for the creation of these cultural institutions will be far more successful in their pursuits if they understand the basics of the carbon-nitrogen ratio and the soil-food-web. Building a compost pile, feeling it heat-up over the course of a week to an untouchable temperature of 150 degrees Fahrenheit, then releasing it into the best gardens into a productive garden is a meaningful educational experience that provides a deep connection to and reverence for the natural world. In addition, the very actions that demonstrate these relationships are in and of themselves, improving the local environment in meaningful and measurable ways. Students composting excess animal manures, invasive weeds and shredded paper to create healthy usable topsoil, are reclaiming waste resources, sequestering carbon and creating habitat. The landscape itself directly reflects the mutually beneficial potential. Personal participation in the environment, to improve the environment can create meaningful changes within and connection to the environment.

I have used my masters project as well as the Outback Expeditions field course to study personal experiences for Western students and the Bellingham Community. And I will continue with this educational practice long after the completion of my masters degree.

Care of People

Environmental and Social Justice are inextricably linked. Over exploitation of natural resources is often contingent upon the oppression of marginalized communities. Working with privileged populations of American college students, I may not seem like typical social justice work, but the place-based, experiential context offers great potential for culturally subversive education.

Oppression doesn't operate via the exploitation of cultural differences in race, ethnicity, gender, class, able-ness and education. I understand that my work has not explicitly addressed social and ethnic oppression. As outlined above, the Outback and associated programming have incredible potential as educational and cultural resources and could provide unique opportunities to underrepresented populations. I have not had the capacity to integrate racial justice into my work, though it is a compelling aspect that I hope to address in the future.

The hands-on experiential work does implicitly address a range of other cultural power structures. These include societal expectations regarding education, labor, gender roles and class. The following topics are easily integrated into the hands-on place-based educational work I have been focusing on.

Developing the intellect is a primary focus of academic epistemology. There is an effort to expand this scope for the inclusion of other ways of knowing. It was a prominent theme throughout the EE program and the landscape of environmental studies. Grounding their academic work in first-hand experiences regarding traditional resource management skills of First Nations communities presented a profound demonstration of an “other way of knowing” 10. Their intensive management of shellfish “gardens” was creating improved yields within and around the beds as well as greater biological diversity. Though their practices were not derived through the modern scientific process, they represent a profound understanding of their coastal landscape.

It is practically appropriate to learn other ways of knowing through place-based experiential education. Indeed, it becomes an implicit part of each lesson. Describing to a student the nuances involved in different land-management tasks is a valuable primer. However, the same conversation after an afternoons worth of work takes on a different context and depth of understanding. We can discuss the unique resistance each particular weed species expresses in opposition to being pulled. We can discuss how to listen to a screw gun and why gloves might be better than a broom for clearing out the bed of a truck. These types of knowledge may not be explicitly valued in the academic context, however they represent a valuable learning process and depth of knowledge that can transcend disciplines and professions.
A Careful of Process

This third ethic parallels my third Teaching Foundation: The necessary work is Interdisciplinary Systems Design. Engaging students in holistic, problem-solving to integrate various fields will be critical for developing systemic solutions for systemic issues.

Practitioners of this process are not specialized experts. They are generalists, comfortable in a range of different fields reflecting on our own tool box of field species which readily lent themselves to propagation and thus primitive domestication. Simply imagine a band of early humans carrying ripe fruits in their arms and in their bellies. As they moved toward the nearest seasonal foraging grounds, these fruits would be transplanted through the landscape and present upon the bands return generation after generation. For thousands of years before we discovered the intensive processes necessary for cereal agriculture, we lived inside of an inadvertently cultivated forest garden.

The dawn of agriculture often overshadows this extensive period of human development. Current historical narratives highlight our eventual dominion over nature, promoting the separation ideology and further disassociating us from our environment. Due to direct dependence on the local ecology, and the lack of refined energy resources, pre-modern cultures were not capable of such extreme alienation as we experience today. From its pre-modern orientation, a replicative metaphor was established biological. Thinking of this nature is just one of the processes which make this interdisciplinary systems design so essential for solving our complex environmental and social problems.

The low hanging fruit is ripe for the picking. Imagine the City of Bellingham coordinating an effort to incentivize resident grey-water treatment to offset summer-drought irrigation demands. Every time you wash your hands, your dishes, or your laundry the water is sent through a branching network of pipes, into a basin filled with aerobic decomposers. Waste breakdown is broken into accessible organic forms and taken up by a plum tree planted nearby which turns the waste water into delicious summer snack fruit. Imagine bike trails lined with chestnut trees; freeways lined with timber production. Every year what has been done with the region’s natural environment, and the residue of our actions.}

Harari's work outlines another important component of the modern social landscape; the exaggerated importance of the individual and of the empire. This comes at the expense of the immediate human-scale community. This community is composed of immediate family, friends, neighbors and extensions thereof. For generations, this served as the foundation of many social interactions. They were responsible for the well-being of their immediate families. As young adults they can confidently reclaim their sense of agency. Without a prominent human-scale community to interface with, we lose the immediate feedback necessary for human scale. Prior to electrification, daily behavior reflected seasonal changes in daylight. Prior to refrigeration, fresh food was grown locally. And prior to globalization, work was conducted within the context of the regional economy. The pre-modern environment, both natural and built was composed of much more simple and accessible systems. A person could understand a brick and mortar structure. They knew local trades people such as the butcher and the carpenter. Though they may not have been skilled themselves, they could understand the relatively simple, human-scale systems that composed their immediate environment.

Pipelines move petroleum to refineries. For thousands of years before we discovered the intensive processes necessary for cereal agriculture, we lived inside of an inadvertently cultivated forest garden. For thousands of years before we discovered the intensive, macro-industrial-system exaggerates this problem. The advent of industrial processes has distanced the consumer from the means of production. We no longer understand how farming is made, nor how to repair it. Reinforced concrete walls with integrated structural steel prop up our buildings. Vast power-grids transmit energy across entire mountain ranges. Pipelines move petroleum to refineries. For thousands of years before we discovered the intensive, macro-industrial-system exaggerates this problem. The advent of industrial processes has distanced the consumer from the means of production. We no longer understand how farming is made, nor how to repair it. Reinforced concrete walls with integrated structural steel prop up our buildings. Vast power-grids transmit energy across entire mountain ranges. Pipelines move petroleum to refineries.

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Section 8.1 Conclusion

A summative assessment of my own learning would reveal a (trans)formative process. The change was not a remarkable discovery, nor a shift in direction. It has been a systemic maturation. Beliefs I’ve held dear have been reinforced and hardened. Connectivity has increased across my conceptual framework and the result is a refined and more resilient educational philosophy.

My unique approach to this program has been fun. The additional layer of integration across my entire body of work has been both challenging and rewarding. The separate paths of developing a position and a curriculum have each provided valuable lessons and opportunities which certainly justify the process.

The programmatic development of the Outback has been an nebulous goal. The potential of that landscape to teach the students of WWU and serve the community of Bellingham is remarkable. The necessary development is clearly continuity through professional staff. If given the opportunity to develop that potential, I would simply do my best, which has improved a good deal since the beginning of this journey.

A unique component of place-based, design-focused, experiential education has been facilitating students as they explore a wide range of their own capabilities. Cataloging botanical names, handling tools and exploring novel world-views have all been important lessons in their personal development.

As these lessons and topics overlap, I believe they gain the confidence necessary to participate in the various systems that compose their environment; that is they expand their sense of agency. Working with students in this space has provided valuable insights regarding my teaching practice. I am drawn towards a longer-term relationship than the typical college course provides. Through an ongoing staff position, or even consistent courses held in the Outback, there is potential to shift from a professor to a mentor. This is a class of teaching that deeply interests me and will likely shape the next phase of my professional career.

This project has shown me that there exists a great enthusiasm and desire for my particular teaching practice. It is my intention to do the best I can to provide students with these learning experiences. And it is my hope that they will use these experiences, skills and values to further propagate the same. And in time, we will have a more resilient and healthy community.

Section 8.9 Bibliography

Section 1
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Section 2

Section 3

Section 4

Section 6

Section 7

Section 8