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.

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in partial completion of the
Masters in Environmental Education

w/ Dr. Nick Stanger
Huxley College
Western Washington University
Spring 2017
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Section 0.1 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 design 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 position to foster long-term growth and development of the run program, towards the integration of a non-student staff position in order to improve the self. 2

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.

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 Habitats 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.

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.

Environment:

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 “ecosystem” is a perspective by the visionary designer Buckminster Fuller. In his writings Bucky defines the universe as everything, and the environment as everything other than the self. 3 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.”

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 concept 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 into the realm of co-creation 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 make 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 plate tectonics 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 organization 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.

Praxis

My teaching practice reflects my own learning process. For many reasons, I have grown accustomed to learning through a very tactile, hands-on approach, encouraged by intentional critique and personal reflection. Drawing, design school, apprenticeships, entrepreneurship, etc have all reinforced this process. It is not always pretty, but it makes for strong connections and meaningful lessons.

As an instructor, I have had great opportunities to teach in the way that I learn. Most of my courses are hands-on and skill-based. Subjects of this nature (such as drawing) 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 it is difficult at first to single out the most appropriate fit. That is until one reads the explanation of the Praxic Current: “This current emphasizes learning in action, by action, and for the ongoing improvement of action. It is not a matter of developing knowledge and skills beforehand, in view of potential action, but rather of placing oneself into a situation of action and learning through, by, and for that project. Such learning calls for reflexivity throughout the project. Praxis essentially consists of integrating reflection and action such that they feed one another.” 1

This document records my personal narrative as I learned my way through a Masters of Environmental Education. Significant works from the canon 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 approach. Most of my courses are hands-on and skill-based. Subjects of this nature (such as drawing) 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.

My teaching practice is a direct reflection of my preferred learning process, which is certainly praxic in nature. Try it out; see what happens; learn from the feedback; improve next time. By design, this approach was deeply integrated, into my masters study and has come to define my educational philosophy. Indeed, I was teaching college level drawing courses throughout the extent of my masters program and would often immediately apply new concepts from my course work to the lessons. I was teaching that week. These experiences provided immediate feedback which led to more questions and meaningful connections. The cycle persisted for nearly three years. Through this process I was able to learn in my preferred manner of applying theory, receiving immediate feedback and then correcting and refining my practice for the next iteration. My personal experience with my drawing students has revealed great value in this process, which no other study, researcher or article could have revealed.

As my masters project has developed, I have been able to integrate both academic and experiential lessons in education into new EE curricula. This context has proved more challenging because the feedback often takes many weeks, months or even years. Opportunities for learning with immediate feedback do exist though these often involve large transformations in the landscape, created through a group learning experience. The capability of 20-35 adults collaborating and participating in an ecological context is often novel and empowering for young adults. Working inside of a space through clearing, planting or building is often a remarkable learning experience for students as evidenced by their often impressed reactions. Smaller scale participants can also have immediate feedback, and the associated reflection, though these either require more substantial background knowledge, more intensive facilitation, or a lot of student focus and intention.

Categorizing this educational approach is simplified by Lucie Sauvé’s “Currents in Environmental Education.” Any pedagogy will likely embody a range of her listed typologies and it is difficult at first to single out the most appropriate fit. That is until one reads the explanation of the Praxic Current:

“...Current emphasizes learning in action, by action, and for the ongoing improvement of action. It is not a matter of developing knowledge and skills beforehand, in view of potential action, but rather of placing oneself into a situation of action and learning through, by, and for that project. Such learning calls for reflexivity throughout the project. Praxis essentially consists of integrating reflection and action such that they feed one another.” 2

This led to the continual development of my practice and skill-based. Subjects of this nature (such as drawing) 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.

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 more concrete 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 days.

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 Sauvé’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. They 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” 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 unmolested ecosystem produces an ecologically conscious citizen without access to land. These are all entry points for rich daily instances of separation. This perspective creates endless opportunities for illustrating our daily ecology as a mere derivative of buying and consuming less.

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. "The People of Cascadia" 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” 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 permaculturists. By design, they have rehabilitated a 20-acre wetland over the course of 25 years. Their economy and prudent resourcefulness are humbling and inspiring.

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.

<table>
<thead>
<tr>
<th>Sustainable Practices</th>
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<tr>
<td><strong>Disposal</strong></td>
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<tr>
<td>Recycle</td>
<td>Buy Organic</td>
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<tr>
<td>Compost</td>
<td>Buy Local</td>
</tr>
<tr>
<td>Reduce Waste</td>
<td>Buy Fair Trade</td>
</tr>
<tr>
<td>Go Paperless</td>
<td>Conserve Water</td>
</tr>
<tr>
<td>Stop Junk Mail</td>
<td>Conserve Energy</td>
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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 affront 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 particular arrangement of the whole. Irrigating 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.
Section 2.1 Methods

I remember crossing paths with Seth Vidaña during my undergraduate studies. He was a graduate student, working to create an Office of Sustainability for WWU. He intensively developed the concept throughout his studies and following his graduation, he 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-student, staff position 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 it's parameters had a predetermined focus and additional constraints. No course work was seen as separate from the larger mission and upon completion the sum total of these projects is an impressive body of work. I am not sure if this list is necessary, but I think it is worth noting that every single credit I earned in my graduate studies has been integrated into my culminating project.

Conservation Psychology- I conducted a series of interviews with all of the students from 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.

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 facilitator development allowed me to interweave my foundations, as well as previous professional work into a unique teaching and learning experience. The curriculum focused on systems thinking, design processes, sustainability concepts and basic hands-on techniques and practices in ecological design.

Teaching Practicum- I co-facilitated a 2-week, 72-hour Permaculture Design Course (PDC) with instructor Dave Bohnein and Alderleaf Wilderness College. We had 22 students from all over North America. Though I had much experience working in the context of a PDC, this course took on a life of its own as I integrated elements of my masters studies into an already familiar format. The result was a successful milestone in my teaching career.

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.

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 experimental education. The refinements proved successful and we have continued to work with students from this class.

Research and Projects in Environmental Studies- Though intended as an early course to help students refine the individual lessons, the 10-week arc and the intensive logistics associated with hands-on experiential education, the research and projects in environmental studies program could provide 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".

Program Development in Adult & Higher Education- This course provided a platform for the development of an Extended Education program to be run through the Outback. Though not directly related to the Outback Manager Position, the Extended Education program could provide 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

ENVS 588 Fall 2016

ENVS 589 Winter 2017

ENVS 595 Spring 2016

ENVS 500 Winter 2015

ENVS 582 Winter 2015

ENVS 595 Summer 2015

2.2 The Beginning

During the first year of my studies the primary goal was orientation and assessment. As with any design process, I began with an open mind, flexibility and a curious process. His first principle states; “All education is environmental education”, which parallels my preference for holistic perspectives. His second principle states; “The means for learning are as important as the content.” Sauvé’s Praxic Current embodies this principle as well and both of these permeate my learning process and teaching practice.

The conclusion of my first year was the implementation of the curriculum I designed in ENVS 582 via Fairhaven College. As a final step in my orientation, I applied these newly learned theories in the context of higher education which solidified the value of my unique perspective.
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 protracted 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.Ministrative work were both Associated Student Outback Coordinators, two college Dean’s and an Outback alum/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 impediment to its inception; a chicken and an egg. Though I did not find Fields of Learning until 2016, Laura Sayre 12 concludes in her comparative evaluation of 15 higher-ed student 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 hiding 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 formalization 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. Grappling with 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-inspiring 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 my 588 work as a blueprint for my plan in earnest during the spring of 2017, only to be diverted down another unanticipated funding route. Somewhere between this committee recommending that this committee then offer this position to 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 daunting to master. 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 agriculture.

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 for 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 12 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 project. 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”).

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.

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.

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-how grad 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 a 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 Wolschlager and Nick Spring in 2008. It was planted with fruit trees, berry bushes and a collection of edible species. It has since been developed over 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.
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. I could write 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 installing drip irrigation. It was the first 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 wheelbarrow 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 resources and no shortage of projects. Plants needed care. Machines needed repair. And improvements to existing systems were always welcomed. We were encouraged to engage with all of it and supported through a range of educational means, the most important of which was self-motivation.

This deviates from a more typical student experience in conventional educational systems where learning is characterized as the transmission of knowledge from an expert to a student. This unilateral relationship is the primary educational model and though students need to take responsibility for their own comprehension and performance, most of that is administered and judged by an instructor. Unilateral transmission can be an effective and appropriate teaching method such as answering trivial questions regarding tallin plant nomenclature. But for a deeper understanding, students need to relate concepts to their existing mental frameworks.

I have designed and taught college level drawing courses for several years. I have also been an instructor at the University of Washington and as a student, created further opportunities for teaching the material I am so interested and passionate about.

Ecological Design I

In line with my strategy for integrating projects across my masters program, I developed an opportunity to teach the curriculum that I had designed in EnVS 582. Implementing the curriculum dramatically increased 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 Tuftil 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. Revisions 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 weeks later. This course was also deemed successful by the students and improved confidence.

The third iteration is still very remarkable. Support from two co-teachers has made this experience dramatically 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 which the faculty and students of Huxley College deem valuable enough to continue offering.

Ecological Design I: Schedule Overview

This class will begin with the customary introduction and overview of the process and projects.

As the quarterly process, the majority of the course will take place in the field. We will begin with a tour and simple tasks to get familiar with the space. A series of Agroecology Primers will give students a baseline of skills for working in a productive landscapes. "Medium Work Projects" will involve simple planning and design and set up "Facilitated Team Projects". These will be more intensive installations, designed and implemented by each of our working teams. The schedule leaves ample time for this work and includes a range of overflow projects if there is need.

Course Calendar

<table>
<thead>
<tr>
<th>Week</th>
<th>Monday</th>
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Course Materials

- Clipboard
- Boots
- Gloves
- Dry Clothing

Work Projects

- Trail Swale
- Access Development
- Forest Garden Maintenance
- Brunch & Pruning
- Assisting Coordinators

Agroecology Primers

- Annual Production in Common
- Hot Composting
- Perennial Production in the Forest
- Tree Pruning

Medium Projects

- Rot Rill Treatments
- Embankment Excavage
- Pond Sink Installation

Team Projects

- Pond Restoration
- Assisting Coordinators

Overflow Outlets

- Gardening Tasks
- Access Development
- Forest Garden Maintenance
- Brunch & Pruning

Assisting Coordinators

- TBD

Course Materials

- Clipboard
- Boots
- Gloves
- Dry Clothing
- Warm Clothing

Prepared at: Fairhaven College

4.1 Teaching

The Outback Management concept 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.

Cikszentmihalyi outlines three different conditions that have to be met in order to induce the flow state:

1. One must be involved in an activity with a clear set of goals and progress. This adds direction and structure to the task.
2. The task at hand must have clear and immediate feedback. This helps the person negotiate any changing demands and allows them to adjust their performance to maintain the flow state.
3. One must maintain a good balance between the perceived challenges of the task at hand and their own perceived skills. One must have confidence in one’s ability to complete the task at hand (*)

The parallels between Cikszentmihalyi's flow state and Savoís Práxic Current are numerous. Both concepts are deeply embedded in our own environmental educational practice which prioritizes teaching via immediate participation and feedback from the environment in pursuit of better human-environment relationships.

Much of this is based on the constructivist learning model which advocates student centered, discovery learning. During these processes students use mental models and understanding to acquire more knowledge.

Place-based, design-focused experimental 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 easy accessible points of connection between existing mental frame works, the physical environment and novel theories and concepts. Nestling all of this inside of a transparent educational system encourages self-aware, self-motivated integration of theory and practice via direct participation in our shared environment.

Over the years, my students have enjoyed hands-on, boots-on, interdisciplinary approach to understanding their personal role inside of their local ecosystem. I have watched this pedagogy reveal empowering new perspectives 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 work with and improve these systems; and to developing the sense of agency that is needed to become an active, innovative citizen with a healthy relationship to their culture and environment.

The third iteration is still in progress. Remarkable support from two co-teachers has made this experience dramatically 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 which the faculty and students of 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 underachieving 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 between the home and school that are relatively insulated from the market, powered by the energy and enthusiasm of twenty-somethings, and enriched by the intellectual resources of academe.”

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 often shared with the Bellingham Food Bank. Skill-based workshops are frequently hosted and open to both students and the public. Students and instructors alike acknowledge the unique potential of the space, though only a small population are compelled to fully engage. I believe that many of the barriers to participation could be overcome with effective administration.

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 reservations, budget requests and camping arrangements. I have many people experience in this domain, so it runs on a tight budget. But it is organic, a bit ramshackle; it operates with what we have.”

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 demonstrated in a balance between community and institutional goals and inputs. Feedback loop severely limits programmatic development. A distinct lack of institutional memory as well as accessible administrative resources are barriers to student leadership consistently under informed and overwhelmed. This cycle has led to a degree of stagnation where the program is indeed meeting its listed 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 administrators.

Pursuing the formation of an Outreach Specialist position 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 effort 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 Outreach 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 a 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 student employment opportunities to students who 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.

Section 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 interviews, John Turolli 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 experience in their daily lives, limitations that are not reflected in the rest of the University.”

I appreciated this perspective and it strongly reflected my experience working within the Outback 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 gardens, 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 Garden), 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.

<table>
<thead>
<tr>
<th>OUTBACK EXPERIENTIAL LEARNING PROGRAM (OELP) LOGIC MODEL</th>
<th>INPUTS: SOFT ASSETS:</th>
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<tbody>
<tr>
<td><strong>CONTEXT:</strong> 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.</td>
<td><strong>OUTCOMES:</strong></td>
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<tr>
<td><strong>SITUATION:</strong> 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, alas the Recycle Center)</td>
<td><strong>OUTPUTS:</strong></td>
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<tr>
<td><strong>PRIORITIES:</strong> -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.</td>
<td><strong>ACTIVITIES:</strong></td>
</tr>
<tr>
<td><strong>PROGRAMMING:</strong> Personalized -3 .5 FTE AS Student Staff Positions -Fairhaven Faculty Advisor -AS Program Advisor -6-10 Work Study Students Outreach -Media &amp; PR (Posters, Website, AS Publications)</td>
<td><strong>STRENGTHS:</strong></td>
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<td><strong>NEGATIVE FEEDBACK CYCLE:</strong></td>
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### BUDGET:

- **$5600 Fairhaven Annual Budget**
- **$9260 AS Outback Manager Salary**
- **$8614 AS Assistant Manager Salary**
- **$6801 AS Forest Garden Mgr-Salary**
- **$2850 Work Study Students x8 Positions**
- **$52,475 Annual Operating Costs +One Time Capital Investments** (E.g. ~$35,000 2016 Fencing Install)

### HARD ASSETS:

- **PLANTS:** Seeds & Starts *Manures* Consumables (Row cover, straw, etc.)
- **WATER:** Irrigation (~35,000 Gallons per Month) Storm-water/Burns Creek Flow
- **INFRASTRUCTURE & ACCESS:** 5 Acres of WWU Campus Real Estate -Class Room Tool Shed & Tools Community Garden Beds Green Houses Amphitheater Fencing Burns Laban (Historical Building) -Trails

### PLANTS:

- **Educational Garden Produce** 17500 lbs/year
- **Community Garden Produce (~50 Plots)**

### WATER:

- **Stream (Outflow + Irrigation Runoff)**

### INFRASTRUCTURE & ACCESS:

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

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### CONCLUSION:

In its current pattern of operation, the OELP is currently meeting its stated goals. From the quarter-to-quarter 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 perspective, the OELP continues to operate and develop according to student determined needs and capacities.

The year-to-year Mid-term goals are impacted 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 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.

This three-year study would serve as a proof of concept for the long-term existence of this position.

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 future student employees via a ~25 student course comparable to ENVS 397K Ecological Design I.

Following the initial 3-year pilot position, the ultimate goal will be long-term (7-12 year) performance-based, institutional, financial support for a non-student staff position of Outback Program Specialist.

The proposed Program Specialist position will facilitate the mid- and long-term development of the Outback into an invaluable resource for Western Washington University. Long-term continuity is a crucial component for any campus garden. Programs designed as exclusively student-run are severely limited by the rapid turnover of key personnel.

Adding additional student positions increases capacity, to a degree, but does not contribute to long-term continuity in program and site development.

With programs of this nature, there comes a point in development when the need for organizational maturation supplants the intrinsic value of student direction. The OELP has reached this point. Indeed, the formation of a non-student program specialist has been on the table for nearly 10 years.

Emerging with the AS, the OELP has undergone two major assessments, occurring in 2010 and 2014. These processes analyzed the goals of the OELP, and the efficacy of existing programs. One recommendation in particular arose from both assessments; the need to implement a non-student supervisor position that will oversee and support existing student employees.

Now, the OELP is presented with a unique opportunity. In 2007, the program was adopted by the Associated Students and has seen significant development for the site and program. Along with growing societal interests in sustainable food production, students are increasingly interested in hands-on experiential education as it relates to human-scale sustainable systems. Over the past three 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 similar proposal was developed and presented as an emergent budgetary item for WWU provost’s office, where it was also denied. A primary goal throughout my process has been developing and securing long-term (7-12 year) performance-based, institutional, financial support for an Outback Manager.

The following strategies represent less conventional funding options, but given the unique nature of the site and program, they seem like practical routes forward.

1. Distributing the cost via a tiered sponsorship structure for primary and secondary OELP stakeholders;
2. Applying for an Sustainable Action Fund Grant (currently underway);
3. Seeking funding off-campus.

The overarching strategy has been the pursuit all of these options, seeking matching support from each to limit their upfront investment while overcoming the startup challenges of long-term programmatic development.

Support

Throughout this process, I explored the various mechanisms within Western University 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 fund 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 sensible future 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)

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

• University Residences- (Outback is surrounded by dorm students)
• Student Employment Office- (Supports ~8 work-study positions)
• Dining Services- (Promotion of Real Food Challenge on Campus)

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

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

These 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 First Tier (~$8,000 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)

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 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)

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)

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).
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 assimilation and success within the sociocultural system.

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 passed me by during 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 such a split. Reading books and articles 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-ascribed black sheep identity. Though my peers and instructors valued this perspective, few had fully contributed to a self-ascribed black sheep identity. Though our different and very busy schedules, these were often left unresolved.

This lead to another type of frustration throughout my studies. I often felt compelled to adopt the material was distilled from my permaculture teaching Foundations I outlined in section 1.5). This ethic obviously underlies the entirety of environmental education. Even still, there is room for a range of 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 and my colleagues who were studying 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.

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 might work connect 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 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

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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 the potential. These are the creative individuals 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 young adults. David Drovers outlines this potential in his writings on experiential education in higher ed:

“Experiential education moves more focus from the subject 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.

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 realizing the sheer amount of nutrients that result 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 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, sequencing carbon and creating a 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 Outlook Experiential Learning project to develop experiential opportunities 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 may not seem like typical social justice work, but the place-based, experiential context offers great potential for culturally subversive education.

Oppressive systems are designed to 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 epidemiology. 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 sustainable socially-engaged work with Native American communities presented a profound demonstration of an “other way of knowing” 27. 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 these coastal landscapes.

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 character 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 cleaning 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.
Community
The work of Yuval Noah Harari has been highly influential in my most recent Ecological Design I narrative. His book *Sapiens* ¹ offers a unique historical perspective which parallels my own thinking on the natural cultural history of 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 towards the next 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 dominance 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. Theirs was a 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 trade 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 environment.

Our modern western environment is far more complex. The advent of industrial processes has distanced the consumer from the means of production. We no longer understand how the consumer 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. Buildings. Vast power-grids transmit energy across entire mountain ranges. Pipelines move petroleum to refineries. Concrete walls with integrated structural steel prop up our buildings. Vast power-grids transmit energy across entire mountain ranges. Pipelines move petroleum to refineries. Dark, tall, and industrial.

Beyond this scale we rely on our shared mythologies to facilitate larger more complex populations; an empire is composed of immediate family, friends, neighbors and other members were held accountable for their own actions. This abstraction of the built and isolation from the grown severely limits the ability of an individual to interface with our built environment. Likewise, the separation ideology leaves us with a disjointed sense of who we are and when even of them understand their individual and collective capacities, it has the potential to become very subversive.

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 systems logic for systemic issues.

Practitioners of this process are not specialized experts. They are generalists, comfortable in a range of different fields reflecting on the worlds most familiar species as a generalist. My BS was an even mix of diverse fields; a quarter liberal arts, engineering, environmental studies, and art & design. Following my undergraduate studies, I apprenticed under generalists and learned everything from grafting fruit trees to wiring off-grid, photo-voltaic electrical systems. The businesses I have founded offer a diversity of services in integrated site and systems design. Even my career as an educator is broad in scope. I have taught in six different colleges. A systems-thinking approach helps to break down the perceived barriers between fields and reveal common patterns in analogous processes. Urban gentrification and ecological succession both demonstrate a system changing its conditions and adapting to the new environment. Emergent hierarchy in social systems and system of systems theory is an example of 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 industrial gray-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 is broken down into formations that are then 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 dominance over nature, promoting the separation ideology and further disassociating us from our environment.

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These particular examples also address pervasive cultural relationships to physical labor. Our current culture has a pattern of undervaluing and even deriding occupations that work with their hands, body, and brain. Handicapped by the fact that college students are not often taught the basic means of production and many of my students show great humility regarding their practical ineptitudes. Teaching students through the use of hands-on, body- and brain-inclusive pedagogy glances into the value of other ways of knowing. The Outback is a platform for many different systems and their associated trades.

Garden carpentry has proven to be a rich learning experience for many students. Plumbing irrigation systems appears necessary work is Interdisciplinary Systems Design. Engaging students in holistic, problem-solving to integrate various fields will be critical for developing systems logic for systemic issues.

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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 a nebulus 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 remarkable. The necessary development is clearly continuity through professional staff.

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.

As these lessons and topics overlap, I believe they gain the confidence necessary to participate in the various systems that comprise 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.

Section 9.1 Bibliography

Section 1

Section 2

Section 3

Section 4

Section 6

Section 7

Future Lessons-
After a successful day during the third iteration of my Ecological Design class, I sat down and drew up what we had accomplished. The tasks were simple: composting, nursery work, brush-clearing, terracing and transplanting a few of our favorite species. I have been intrigued by this drawing since the night I made it. It is in one of my usual styles and a subject matter that I am very familiar with. However, it seems like there is new potential here, as if this could be the beginning of a simple educational language. It might help students to better learn through their work in the Outback. If taught to students, it may eventually help others understand them and support their cause in the future. We will just have to try it out and learn as we go...