Discovering the Ecological Self with Children

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Social Practice Art (also called Socially Engaged Art) can be used as a powerful tool to bring youth back into relationship with nature, creating an emotional connection to nature that inspires participants to long term action around the Sustainable Development Goals (SDGs). Discovering the Ecological Self (D-Eco-Self) is a socially engaged art project founded by environmental artist, Kimberly Callas, in 2016. This project focuses on the SDGs that closely align with environmental sustainability. D-Eco-Self addresses environmental issues with communities by exploring personal and universal nature-based symbols and patterns through research and art making with the intention to re-awaken our relationship with the natural world and create a deeper understanding of our role in nature as a responsible participant.

In the last three years, the project has taken place through workshops and residencies in New Jersey, Nebraska, Maine, California, and Spain. Work from the project has been exhibited internationally in galleries and museums, including the CICA Museum in South Korea, Flowers Gallery in New York City, the Pensacola Museum of Art, Pensacola, FL., and has received several grant awards, including a Pollination Project Grant. It was also featured in the Huffington Post.²

This paper will describe how the project's background has informed its current structure, give a description and examples from the project, and share the results of a 2018 study on *D-Eco-Self* by Dr. Megan Delaney, PhD, LPC, a researcher on Ecotherapy. This mixed- methods study used both qualitative and quantitative data to look at how participants made meaning out of their Social Practice experience and how the project influenced the participants connection to nature.

Lead artist, Kimberly Callas, came to Monmouth University, a private university on the Jersey Shore, in 2016 after 15 years working in sustainability in Maine. She had moved to Maine with her partner, George Callas, after 9/11. They had been living in Jersey City, NJ and working in Manhattan when 9/11 occurred. In response to this event and the resulting Iraq war, they moved to Maine determined to find ways to live within the natural cycles of the planet and reduce their dependency on foreign oil. Once in Maine, they built an in-ground, eco-house, that is off the grid and heated solely with wood, https://kimberlycallas.com/our-eco-house-in-brooks-maine/. They

¹ "About the SDGs." Sustainable Development Solutions Network. Accessed July 29, 2019. http://unsdsn.org/what-we-do/sustainable-development-goals/about-the-sdgs/.

² Nessel, Ariel. "You May Have a Right to Know, But You May Not Have Rights to the Information." HuffPost. Last modified September 25, 2017. https://www.huffpost.com/entry/you-may-have-a-right-to-know-but-you-may-not-have_b_59c5a437e4b0b7022a646a92.

then co-founded a sustainability institute called Newforest, with Russell and Andrea Read, https://kimberlycallas.com/newforest-institute/.

Newforest Institute, in Brooks, Maine, provided opportunities for research and education in sustainability to a broad range of the community, including school children, college students, energy auditors and permaculture gardeners. (Permaculture uses the study of ecology to seek ways that humans can have access to food, energy, and shelter in a sustainable way).

They founded Newforest guided by the belief that "to restore to the human community its ability to see itself as nature, embedded within the larger landscape, is a fundamental and indispensable act of environmental restoration." Seeing ourselves as nature "allows us to act more often in concert with nature, creating in both the built environment and natural worlds systems that would allow the human community to meet its needs in ways that promote sustainable ecological health."

Through working with the community and interns at Newforest, Callas realized it was our more emotional connections to nature, rather than the ecological data, that instigated systemic sustainable behaviors and change. Working at Newforest impacted her decision to start D-Eco-Self and helped inform how the project is structured. She learned many things through sustainability that guide *D-Eco-Self's* current work.

One of the key learnings was that people have a hard time relating to the environmental data. Data did not seem to inspire the actions that are needed to address the vast environmental issues. Action was more readily had when a person already had a previous relationship with the land, location, or species. For example, despite political leanings, a person that fished in a stream as a child with their father will go out of their way, working evenings and weekends and organizing others, to protect that specific stream. This is a disconnect between data and emotion, or what applied philosopher and fellow at the Centre for the Understanding of Sustainable Prosperity, at the University of Surre, Johathan Rowson, calls the facts and the feelings. "This crisis of climate change, in particular, is a crisis of disconnection between 'the facts and the feelings'. We know something is true; we don't feel it's true. We don't live as if it's true. ... We speak as if we believed it, but it's not obvious from our behavior and the way we vote and what we campaign for, how we talk, that we accept this as a real problem." So, the question becomes: how can we connect facts and feelings and help people re-find or create meaningful connections to nature that will enliven environmental action? It was Callas' hope to re-awaken these connections that led her to 'the ecological self' work.

The second key learning that inspired D-Eco-Self is the idea that 'we need artists at the table.' At Newforest, and at the other organizations Callas joined to further the sustainability mission, she served on boards that were working on large social issues with people from different fields: economists, bankers, tech innovators, scientists, and city and state government officials. She saw firsthand how bringing together arts and a variety of fields through interdisciplinary collaborations

³ Read, A., Callas, G., Maseychik, T., Callas, K., Kekacs, A., Read, R., Lilieholm, R. J.. "Newforest Institute: Restoring Habitat for Resilience and Vision in the Forested Landscape." Ecosystems and Sustainable Development VII., WIT Press, 2009, pp. 427–428.

⁴ "Jonathan Rowson - Integrating Our Souls, Systems, and Society." *The On Being Project* (podcast). July 18, 2019. https://onbeing.org/programs/jonathan-rowson-integrating-our-souls-systems-and-society/.

fosters rich, creative, innovative environments. She found working with different types of thinking and working styles an inspiring and fruitful experience, but what she had not anticipated was the value she brought to the boards, not as a community organizer or sustainability specialist, but as an artist.

While working with communities, Callas saw how artists bring an important set of skills that help facilitate social change. The University of Central Lancashire's 2011 study *New Model Visual Arts Organizations & Social Engagement* helps articulates why this is so. Their research has offered insights into the ways in which transformation takes place in socially engaged practice. "It does this by creating new, shared forms for the expression of individual and collective feeling, while sustaining a critical consciousness. Based on the empirical data, the report identifies and illustrates dimensions of this transformative practice.

There are several ways in which socially engaged arts practice enable people to envisage how things might be different. These depend on the function of the artwork or artistic process as an 'aesthetic third.' The aesthetic third is conceptualized in the report. In summary it enables:

- a point of symbolization and communication between those who engage with the artwork
- articulation of 'inner' individual experience with a shared culture
- alternation between embeddedness and critical distance which supports the thinking needed to conceive of change
- the creative illusion needed to see how things can be different
- the quality of attention needed to sustain emergence, ambiguity, and complexity
- the development of new visual and performative languages needed to experience and represent the world from a different point of view." 5

To achieve the SDGs, it is well known that we must work across disciplines and across borders, but before Callas did not understand the value that artists bring to this work. When she first moved to Maine, she did not know if she should be an artist anymore. After 9/11, did art really *do any good? Did it matter?* But as she started getting more involved in helping people re-connect to nature in meaningful ways, art became a powerful connection making tool and way to share that connection with others and she wanted to bring this experience to her students and future artists.

Callas took these key components from her work in sustainability and began combining science and meaning-making through contemplative art making and founded D-Eco-Self in 2016 as an interdisciplinary Social Practice project.

⁵ Froggett, Lynn, Robert Little, Alastair Roy and Leah Whitaker. *New Model Visual Arts Organizations & Social Engagement*. Preston: Psychosocial Research Unit, University of Central Lancashire, 2011. 8.

DISCOVERING THE ECOLOGICAL SELF

https://discoverecoself.org/, video: https://youtu.be/XULycYn3b0l

Discovering the Ecological Self is a collaboration with artists, college students, faculty, community non-profits, volunteers and, of course, nature. Current collaborators include: Aslan Youth Ministry, faculty and students from the Art and Science Department at Monmouth University, and environmental volunteers and activists. The project is organized around course work, afternoon workshops, and field research, as well as, group and individual research projects and art making. Students from Monmouth's AR218 participate as part of their Sculpture 2 credit and receive a Gen Ed Service Learning designation for the course.

Aslan Youth Ministry is a local non-profit that works with at-risk children from Asbury Park to Red Bank, New Jersey. The results from the following study focus on the middle-school aged students from Aslan. Aslan brings 6 to 10 students a year to a series of D-Eco-Self workshops lead by Callas and a team of Monmouth Art and Science Students. The workshops are held on and off campus and are supported in part by a Pollination Project Grant, the Monmouth Service Learning Faculty Fellows, and the Urban Coast Institute.

During D-Eco-Self workshops, participants explore how humans relate to place by looking at significant personal and universal symbols and images from nature, researching them through historical, scientific, and symbolic lenses and then making artwork that responds to what they have discovered. Through the process, participants remember significant, meaningful, connections to nature and develop meaningful new ones. How this is done can vary greatly depending on the topic, the community and the type of artwork being made. Dr. Delaney's research on D-Eco-Self around 'meaning-making' is helping Callas refine ideas and come up with new approaches.

A website has been created that has examples of workshops from the last three years, https://discoverecoself.org/. Though D-Eco-Self facilitates afternoon or day long workshops around the ecological self at conferences and with various communities that focus on individual symbols from nature, when they work with the Aslan Youth group they choose a theme for the year that becomes the overriding symbol. Some of the artwork presented on the website is based on the themes of "2017 Nature's Patterns", "2018 Ocean", and "2019 Trees".

During a semester, Aslan youth will attend 6-8 D-Eco-Self workshops and field trips. During the workshops, they focus on that year's theme and different symbols contained within the theme. With the 2019 Tree symbol, they also looked at the symbol of the seed, roots and branching and related tree rings to life lines.

The workshops start with three five-minute presentations. Science students give a talk on the science that is related to the symbol. For example, they may present on tree seeds, reproductions, and growth. Social Practice students will then give a short talk about the topic as a symbol and how people have made meaning from the topic. For example, they might talk about how a seed can represent potential and look at how seeds are represented in artwork, poetry, and in basic language, as in "Let me plant this seed...' as a way of presenting a new idea to someone. The Archive for Research in Archetypal Symbolism's database and the Google Cultural Institute are some of the databases used for art and other cultural images. Art students or Callas will then give an art demonstration on whatever technique they are going to use that day. They have used drawing, clay, collage, printmaking, rubbings, plant pressings, scrolls and 3D printing.

The topic is then related back to the individual in some way. For example, with the seeds, they asked the youth what is something they are trying to 'grow' in their lives. Therefore, addressing the seed as symbol. Then they, all together, make artwork that combines and synthesizes what they have learned through the presentations and conversation. For the seed project, they made scrolls with drawings of seeds growing into imaginary plants that contained what they wanted to grow: 'better grades,' 'basketball skills,' etc. This brings a personal element to the universal symbol. The scroll now acts as the 'aesthetic third' where the inner experience becomes part of the shared culture. Again, from the New Model study: "The aesthetic third contains both something of the individual and something of the world, meaningfully conjoined. It is in the link – the experience of being meaningfully conjoined with a bit of the world that well-being resides...not just the discovery of something new, ... but the discovery of a personal relationship to something new – an enriching expansion of relational possibilities."

At the end of the year, there is an exhibit with an installation that brings together the topics covered throughout the semester. At some point in the semester, they also pair an environmental action with the topic, for example, planting trees.

For 2019 Trees installation exhibit, the participants decided that they wanted to focus on trees' ability to produce oxygen and called their installation "Oxygen is Important". To mimic the light effects of walking through a forest, the art students and the Aslan youth built an 8' x 6' x 8' tall structure out of branches and leaves. Instead of hanging fruit, they hung oxygen masks. A simple but powerful statement.

By creating a new shared culture together, participants actively practice envisioning a better future and then work towards creating it. The artwork becomes a holder of this vision and can act as an ongoing stimulus and way to share the ideas and visions with others. It can also act as a catalyst to bring diverse groups together to help accomplish these goals. For example, D-Eco-Self brings together university faculty and students from various fields, nonprofits, school aged children, artists, activists, and volunteers around environmental issues.

In 2018, to learn more about the effect the project was having, Dr. Megan Delaney, PhD, LPC, assistant professor in professional counseling at Monmouth University and eco-therapist offered to conduct a study. This study was partially funded through an Urban Coast Institute grant.

D-Eco-Self Study by Dr. Megan Delaney, PhD, LPC

This mixed method study on D-Eco-Self investigated the experiences of 7 adolescents after exposure to this experiential nature-based art service-learning project. Qualitative data from focus group coding revealed the adolescent students' domains included the enjoyment of experiential learning and a deeper connection to nature. Pre and post test data using a connection to nature inventory showed that participants increased in overall connection to nature with significant results within the responsibility for nature domain. These findings highlight the benefits of nature-based socially engaged initiatives and the impact on children's' engagement in environmental responsibility

One of the byproducts of our changing world is our migration indoors as nearly 90% of our time

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⁶ Froggett, *New Model*, 98.

is now spent inside.⁷ Research over the past several decades indicates that exposure to the natural world helps foster a deeper and more meaningful relationship with nature. A strong personal relationship with nature is linked to long-term advocacy efforts in support of the survival of the planet.⁸ With less exposure to the nature world, how do we cultivate a meaningful relationship with nature?

The *Discovering the Ecological Self* Social Practice project is centered around reconnecting children with the world around them. The part of the study presented here involves local children from a mostly immigrant and lower-income community who participated in a semester-long interactive experience. At the end of the program, the children designed and created their own personal ecological masks.

Methodology

Qualitative inquiry through a phenomenological approach explored how students made meaning of their work during the D-Eco-Self project. A sense of meaning correlates with many helpful factors including emotional health, overall well-being, and engagement in academic work. A post-intervention focus group after the last session was coded with a phenomenological lens. Themes were identified from the student experiences during the project. Quantitative inquiry explored participants connection to the natural world via several domains using the Connection to Nature Index; a validated trait measure inventory developmentally appropriate for ages 8 through 12.11

Examples from the Qualitative Results:

Enjoyment of Experiential Learning

[This project] open our minds about how art and nature... to how art and nature are connected.

[This project was] exciting; different; fun; new. I mean, I like never did this stuff before, they don't teach you this stuff in school.

Deeper Connection to Nature

[This experience has made me think differently about] how valuable nature is and how we have to stop hurting it.

⁷ Thorp, A. A., Owen, N., Neuhaus, M., & Dunstan, D. W. (2011). Sedentary behaviors and subsequent health outcomes in adults: a systematic review of longitudinal studies, 1996–2011. *American journal of preven4ve medicine*, *41*(2), 207-215.

⁸ Hinds, J., & Jordan, M. (2016). Ecotherapy: theory, research, and practice. Palgrave Macmillan, New York. NY.

⁹ Schwarz, J. E. (2016). Meaning-making in early adolescence: Practices and perspectives of school counselors. The Journal of Counselor Preparation and Supervision, 8(2) doi:10.7729/82.1174

¹⁰ Cheng, J. C., & Monroe, M. C. (2012). Connection to nature: Children's affective attitude toward

nature. Environment and Behavior, 44(1), 31-49. doi:10.1177/0013916510385082

¹¹ Bragg, R, Wood, C. Barton, J. & Pretty, J. (2013). Measuring connection to nature in children aged 8-12. A robust methodology for the RSPB. Retrieved from the Royal Society for the Protection of Birds website: heps://www.rspb.org.uk/globalassets/downloads/documents/positions/education/measuring-connection- to-nature-in-children-aged-8---12---methodology.pdf

I can be an example [to] other people and show them how they can make a change too. I will be the change!

I'll take care of nature better. I didn't realize how much we have an impact on it.

[This project helped me in] realizing how valuable, like how valuable life is.

Table 1. Paired Samples t-tests Comparing Pretest and Posttest Scores

Connection to Nature Scale	Pretest Mean (SD)	Posttest Mean (SD)	t value	p Value
Overall Connection to Nature	3.77 (.45)	3.99 (.33)	-1.56	.17
Enjoyment of Nature subscale	3.64 (.60)	3.67 (.49)	14	.89
Empathy for Creatures subscale	4.36 (.54)	4.61 (.32)	-1.32	.23
Sense of Oneness subscale	4.09 (.49)	4.33 (.43)	-1.05	.33
Sense of Responsibility subscale	4.00 (.47)	4.48 (.57)	-2.71	.04*

1= Strongly Disconnected, 2 = Disconnected; 3 = Neutral; 4 = Connected; 5 = Strongly Connected

These initial results further emphasize how Social Practice can be its own high impact pedagogy. Though a small data set, the study, showed that both Monmouth students and the Aslan youth showed a deep connection to the nature content, enjoyed high performing collaborations with a variety of disciplines, found they could engage across differences, and developed their ability to co-create. Though in its beginning phases, the Social Practice project Discovering the Ecological self, is seen here as a relevant, and possibly simple way, to reconnect humans with nature and to introduce interdisciplinary collaboration across campuses and communities around environmental issues and the SDGs.

Notes

- 1. "About the SDGs." Sustainable Development Solutions Network. Accessed July 29, 2019. http://unsdsn.org/what-we-do/sustainable-development-goals/about-the-sdgs/.
- 2. Nessel, Ariel. "You May Have a Right to Know, But You May Not Have Rights to the Information." HuffPost. Last modified September 25, 2017. https://www.huffpost.com/entry/you-may-not-have_b_59c5a437e4b0b7022a646a92.
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- 5. Froggett, Lynn, Robert Little, Alastair Roy and Leah Whitaker. *New Model Visual Arts Organizations & Social Engagement*. Preston: Psychosocial Research Unit, University of Central Lancashire, 2011. 8.
- 6. Froggett, New Model, 98.
- 7. Thorp, A. A., Owen, N., Neuhaus, M., & Dunstan, D. W. (2011). Sedentary behaviors and subsequent health outcomes in adults: a systematic review of longitudinal studies, 1996–2011. *American journal of preven4ve medicine*, *41*(2), 207-215.
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