

The Role of the Arts in Environmental Education

Dale Colleen Hamilton

Supervisor: Dr. Jose Etcheverry

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ABSTRACT

My Masters Final Portfolio focuses on the arts as a tool for community engagement and environmental education. In order to explore this topic, I created and disseminated several arts-based productions/presentations/actions that served to educate the public about climate change solutions.

The over-arching guiding question for my final portfolio (and this report) is: Can the arts be used to educate and inspire individuals and communities to take actions towards alleviating both local and global impacts of climate change? In other words, is it possible to encourage individuals and communities to become more engaged in climate change solutions by either witnessing or participating in multidisciplinary arts-focused undertakings? And, if so, how can the impact of multidisciplinary arts in community engagement and environmental education be evaluated and documented?

My theoretical framework was that dire warnings about climate change obstacles and climate change solutions, unto themselves, are not enough, especially given that the “climate emergency” has grown only more urgent, with so many resources (of necessity) being directed to the COVID pandemic. This was also my rationale in creating a video version of a one-woman show, rather than a community-engaged approach.

FOREWORD

I used the following fifteen solutions, which I synthesized from my Masters' classes and Independent Directed Studies over the past three and a half years.

Five Es for Climate Change Solutions

1. Energy must be renewable: Use the gifts given by the sun and the wind.
2. Electrification of transportation. Make electric vehicles affordable, not just toys for the rich.
3. Eat less or no meat & fish. Try to make your food ethically & locally sourced.
4. Education, with a focus on girls & women, which is proven to benefit everyone.
5. Engage in community projects. If governments won't or can't help, create a co-operative.

Ten Rs for Climate Change Solutions

1. Reforestation. Trees are the earth's lungs. Let them breath naturally.
2. Restorative Agriculture. Support local farmers & sustainable practises.
3. Retrofit buildings for energy efficiency and only build smart buildings.
4. Reduce, Reuse, Recycle Repurpose at home and at work.
5. Re-train fossil fuel workers for the new green economy.
6. Respect the Earth. It is a living organism and humans are part of it.
7. Reciprocity with Indigenous peoples. Honour traditional knowledge.
8. Rethink your transportation. Use public transit or car-share.
9. Remind your politicians at all levels that climate change must be their priority and that polluters must pay through carbon taxes and credits.
10. Rally & demonstrate. It sends a message to people in power & can help you feel hopeful. Despair can lead to apathy, depression & inaction.

Please note that in the face of the pandemic, it became necessary to pivot from live theatre to digital versions of presentations and performances, so a portion of my research and practise was re-directed to exploring and actualizing interactive engaging digital performances and presentations.

This project has and will have an impact on my career development. I was able to build on my working knowledge of community engagement and broaden it to encompass the specific realm of environmental education. As a longtime community arts practitioner turned Masters student, I now more fully understand the role of the arts in community engagement.

With input from my supervising professor, I established my primary and secondary Indictors of Success for my Final Portfolio.

My primary indictor was that: "I will have created and disseminated the performances, presentations and reports listed as Project Activities."

My secondary indicator was that: "My performances, presentations and reports will receive positive feedback from my supervisor, examiners and survey respondents, including their response to my contention that the arts are a valuable tool for environmental education.

DEDICATION

To my children (now amazing young adults) Kieran and Teeka Rice, and their father (the late) Harold Hyahtsa Rice. And to all the Indigenous and settler people in my life who live and breathe connectivity to all creation.

ACKNOWLEDGEMENTS

Deep gratitude to Dr. Jose Etcheverry for his boundless passion for climate change solutions; the Rural Urban Learning Association for proving transformation possible; and to Rick/Simon who provided moral support as I cracked the academia nut.

TABLE OF CONTENTS

Abstract.....	ii
Foreword.....	iii
Dedication.....	v
Acknowledgments.....	vi
Table of Contents.....	vii
Theoretical Frameworks.....	1
Project Design/Structure	1
Digital Theatre.....	1
Street Theatre.....	1
Reports & Presentations.....	2
Final Written Report.....	2
Methodology.....	2
Project Activities.....	3
COP 25.....	3
Senior Citizen’s Sit Ins.....	3
Gaia Street Theatre.....	4
Eden Mills & Oxford County Climate Solutions.....	4
Walk This Way Virtual Theatrical Hike.....	4
Spatial Chat Virtual Platform.....	5
Climate Solutions Park.....	5
Project Drawdown.....	5
Experiential Learning Project.....	5
She Won’t Come in from the Garden One Woman Show.....	5
COP 26.....	5
Reconciliation to ReconciliACTION.....	5
Emergency Poems.....	6
Three Decades of Community-Engaged Arts.....	6
Research Assistant.....	7
Cowgirls & Indians Script Outline.....	7

Teaching Assistant.....7
Carbon Free Club.....7
Evaluation Surveys of Virtual Hike 8
Turtle Island Acres Draft Plan.....8
Conclusion..... 9
Bibliography..... 10
Portfolio Content List..... 13

Theoretical Frameworks

Community Engagement and Community Arts

The following four key theoretical frameworks (regarding the use of community arts in engaging communities in environmental issues/projects) provided me with practical examples and conceptual foundations for exploring how to improve and enhance community arts as tools for engaging communities in proactive environmental solutions:

1. *The Cape Farewell Project* (David Buckland)
2. *Representing Nature: Art & Climate Change* (Malcolm Miles)
3. *Weathering: Climate Change and the “Thick Time” of Transcorpororeality* (Astrida Neimanis and Rachel Loewen)
4. *Dramatic Action: How Eramosa Faced Its Problems* (Dr. Edward Little)

Project Design/Structure

In keeping with my Plan of Study, the design/structure of my project was four-fold:

1. Digital Theatre:

a) *Walk This Way*, a theatrical hike on the topic of climate change solutions. Pre-pandemic, this was intended to be a community-engaged project and the venue was to have been my 16 acres fronting in the arts-rich & environmentally progressive hamlet of Eden Mills ON, where I have lived for over 20 years and in the valley where my ancestors have lived/farmed for 7 generations. When pandemic restrictions were implemented, I pivoted to create a digital version of *Walk This Way*.

2. Street Theatre:

- a) *Gaia* (One-Woman Show)
- b) *She Won't Come Out of the Garden* (One-Woman Show)
- c) *Senior Citizen Sit-Ins* (Demonstration)

3. **Reports and Presentations:**

- a) Climate Change Solutions in Eden Mills & Oxford County
- b) Project Drawdown Climate Change Solutions
- c) COP25 UN Climate Change Summit (Madrid) Reflections
- d) COP26 UN Climate Change Summit (Glasgow) Reflections
- e) Forty Years on the Frontlines of Community-Engaged Arts
- f) Reconciliation to ReconciliACTION
- g) Turtle Island Acres Land-Based Experiential Learning

4. **Final Written Report:** This report synthesizes and contextualizes my MES work and includes a Bibliography and with all deliverables attached as appendixes, instead of Video Documentary as suggested in my Plan of Study. Presenting it as a report with appendixes was more realistic, given the unpredictability of COVID lockdowns and restrictions.

Methodology

As much as possible in a digital context, I used community-engaged collaborative methods for implementation, in keeping with my work over the past three decades. My audiences were inclusive (open to anyone), intergenerational, multi-cultural, multi-disciplinary, educational and entertaining, with a clear focus on environmental education, specifically climate change solutions.

Project Activities

1. Travelled to Madrid Spain to attend the **COP 25** United Nations Climate Change Summit. As a first-time delegate, I had no expectations or preconceptions about COP25. My original plan was to perform my street theatre at The People's Summit, a parallel event planned for COP25 in Santiago Chile. But when the location of the summit was suddenly switched to Madrid (due to violent unrest in Chile, with millions in the streets protesting economic and social inequities), everyone was left scrambling to rearrange their plans. The People's Summit organizers attempted to switch locations, but simply didn't have the financial resources. So, I'm very grateful to Dr. Jose Etcheverry for connecting me to the York University contingent of RINGO (Research & Independent Non-Governmental Organizations), who generously included me at the last minute as a delegate. After the summit, I wrote a 22-page report/reflection/article called "**Optimism, Surrealism and the Summit.**" I also used this report to develop a slide presentation and presented it to ENVS1000 students (at the invitation of Professor Traci Warkentin) and in my home village of Eden Mills (prior to the pandemic). A shorter version focussing on Indigenous participation at COP25 was, at the request of Dr. Deborah McGregor, posted on York U's Indigenous Environmental Justice website.
<https://iejproject.info.yorku.ca>
2. Undertook weekly **Senior Citizen Sit-Ins** beginning on January 10/19 in front of the provincial legislature in Toronto, protesting the Ford government's inaction/regressive action on climate change. I intended to stage this protest every Friday (as a parallel action to Fridays for Futures Youth Climate Strikes) but Covid made that impossible seeing as I live outside the city and was not able/willing to travel by public transit during a phase of the pandemic when the ways in which Covid19 was being transmitted were still unknown. The placard for the sit-in reads as follows: "Attention all senior citizens, old hippies & baby boomers! You are invited to join a global initiative Climate Change Seniors' Sit Ins as a companion effort to Fridays for Futures youth strikes. Please stage weekly senior citizen sit-ins at your local legislature. Let's make the decade of the 2020s

the new 1960s except make our modern protests healthier, equitable and sustainable! If not now, when?!” While travelling in Spain after COP25, I staged similar sit-in in front of municipal buildings in Madrid, Barcelona and Valencia, with my placard message translated into Spanish by a colleague.

3. Wrote, rehearsed and performed a ten-minute a digital version of my ***Gaia One Women Street Theatre Show*** in the spring of 2021 for approximately 25 colleagues and 55 York U Experiential Learning students. Prior to that I performed it live in the streets of Madrid during COP25; and at an art gallery in Barcelona, Spain. I see this performance as an entertaining way to educate audiences and leave them with an optimistic view of climate change solutions. The performance utilizes a larger-than-life alien puppet (that collapses down to fit into a suitcase on wheels). The basic premise is that an alien named Gaia lands on earth to help humans implement climate change solutions, given that her home planet was able to overcome a similar climate crisis. Gaia offers the 15 solutions (5 Es and 10 Rs) outlined previously in this report.
4. Presented a slide show presentation called ***Climate Change Solutions in Eden Mills & Oxford County*** to York U’s Carbon Neutral Club. I had originally planned to tour with it to rural and Indigenous communities in southwestern Ontario but abandoned this plan due to pandemic restrictions and uncertainties.
5. Wrote and produced ***Walk This Way*** Virtual Theatrical Hike. As the playwright and artistic director, I planned to utilize a collaborative process with residents of Eden Mills and the surrounding countryside, including local Indigenous peoples. The goal was (and remains) to educate (and entertain) audiences on climate change solutions, including: native plants; pollination plants; organic herb/vegetable gardening; composting & recycling; renewable energies and energy retrofits; maple syrup production; food preserving; natural weed and insect control; rain harvesting; water conservation; enhancing forest and river ecologies; aquaponics (producing edible greens and fish in a symbiotic relationship); and demonstration plots of fibre plants for local clothing production as a way to begin addressing environmentally harmful offshore textile

production. The script incorporates elements from *Endangered*, an environmental play I co-created with children at Arte Del Mundo Cultural Centre in Banos Ecuador in June 2019. The production style was to have been that of a theatrical hike, with the audience being led from scene to scene. My land lends itself very well to this staging approach, with existing vegetable and permaculture herb gardens and a 1.2 km accessible trail between two branches of the Eramosa River, surrounded by picturesque woods and featuring: two old-growth cedars with a natural meadow for larger scenes, a maple syrup sugar shack and an Indigenous sweat lodge. When pandemic restrictions were implemented, I pivoted to create a digital version of *Walk This Way*. Given my decades of commitment to LIVE theatre, this went against my core philosophy and practice, but I did my best to make the on-line version as engaging as possible. For example, I had audience members register in advance and mailed or delivered “sensory packages” containing: a tobacco bundle, sunflower seeds, a lavender bundle, mint for tea and maple candies. I also stretched my perceived tech capabilities and learned a new (to me) digital platform called **Spatial Chat**, which is more creative and interactive than Zoom. See Appendix 2 for details of the Spatial Chat component of the virtual hike. I presented *Walk This Way* (virtually) to over 80 colleagues, 55 York U Experiential Learning students and two Grade 5 classes at Rockwood Public School (the rural elementary school nearest to my home).

6. Assisted Dr. Jose Etcheverry in developing partnerships and seeking funding for the **Climate Solutions Park Project**, including the rejuvenation/mandate expansion of a charity (the Rural Learning Association, now the **Rural Urban Learning Association**). I initiated and spearheaded this organizational restructuring, given that I have been on the board of directors of this charity for many years and recognized the potential for a mutually beneficial collaboration with the Climate Solutions Park Project.
7. Attended Project Drawdown’s “*From Climate Change Research to Action*” conference at Penn State University in September 2019. Project Drawdown is a global research organization that identifies, reviews, and analyzes the most viable solutions to climate change, and shares these findings with the world. www.drawdown.org Upon my return

from the conference, I created my ***Project Drawdown Presentation/Performance*** and presented it to York U's Carbon Free Club, just prior to pandemic restrictions. This presentation included a report on the conference proceedings, plus my reflections and actionable items. I structured it in such a way that I can present it theatrically or not, depending on the circumstances. The theatrical presentation approach uses the giant puppet character Gaia, as described previously.

8. Assisted Dr. Etcheverry in coordinating three rounds of a CEWIL-funded **Experiential Learning Project**, structured around the United Nations Sustainable Development Goals and focusing on sustainable agriculture, renewable energies and Indigenous Knowledge. Of necessity, this project was largely undertaken online. I was involved in grant applications and reporting, coordination and facilitation of online sessions.
9. Wrote and produced ***She Won't Come Out of the Garden*** One-Woman Show. I presented this climate solutions focused piece at several fringe venues at the COP 26 UN Climate Change Summit in Glasgow. I also performed it (virtually) for 10 colleagues and 55 York U Experiential Learning students.
10. Wrote an essay called ***Protest & Performance at COP 26***, which reported on my experiences at the COP 26 UN Climate Change Summit and which I blogged and presented virtually as a PowerPoint to 55 York U Experiential Learning students. The link to my blog is: thehummingbirdpost.tumblr.com
11. Created and presented a PowerPoint called ***Reconciliation to ReconciliACTION:*** which offers suggestions for settlers seeking to actively engage with Indigenous people, including their efforts to protect the environment. I was scheduled to present it live at York U in April 2020 but pivoted to virtual and presented to over 60 colleagues and 55 York U Experiential Learning students.

12. Developed a PowerPoint about my three decades of experience in Community-Engaged Arts as a tool for community development and environmental education. It is called ***Three Decades of Community-Engaged Arts*** and I presented it to 55 York U Experiential Learning students.
13. Created (during pandemic lockdowns) a poetry collection, many of which have an environmental theme. It's called ***Emergency Poems: A Collection of Poetry written during the Covid Pandemic and the Climate Crisis*** and I disseminated it through my data base to over 80 colleagues and posted the poems on my blog.
14. Contracted as a **Research Assistant** by Dr. Deborah McGregor to work on York U's Indigenous Environmental Justice Project, a five-year SSHERC-funded research initiative aimed at "developing a distinctive Environmental Justice framework informed by Indigenous knowledge systems, laws and the lived experiences of Indigenous peoples." <https://iejproject.info.yorku.ca>. As part of this project, I wrote ***Cowgirls and Indians***, a script about Indigenous/non-Indigenous relations and environmental activism. I collaborated on this script with my Indigenous son, Kieran Rice, and Coast Salish knowledge-keeper Shane Pointe, and with the approval of the Rice family of the Cowichan Valley and Snuneymuxwa (Nanaimo), Vancouver Island, BC.
15. Contracted as a **Teaching Assistant** in ENVS 1000 by Traci Warkentin, during which I received positive feedback from students and faculty. During my time as a TA (until the pandemic hit) I incorporated theatrical engagement techniques into my teaching methodology. See Appendix 17 for Traci Warkentin's letter of support for my PhD application to York U, which speaks positively of my time as a TA.
16. Became a founding member of York U's **Carbon-Free Club**. I also volunteered for two semesters as the club's Events Coordinator and assisted with club member recruitment. We launched the club on October 29, 2019.

17. Undertook an **Evaluation Survey** of *Walk This Way* Virtual Theatrical Hike. At the end of the virtual theatrical hike, audience members (both adults and grade 5 & 6 students) were surveyed, asking questions such as: “Did you learn anything new about climate change solutions?” See Appendix 16 for survey results (raw data and analysis).

18. Developed a draft plan for **Turtle Island Acres**, an **experiential land-based learning project**, in collaboration with my Indigenous son, on the acreage we own/steward on the traditional territory of the Adawandarin & Mississaugas of the Credit Indigenous peoples (near Guelph, ON).

CONCLUSION

Given my thirty-five years of experience in arts for social change, extensive MES research (see Bibliography) and considering the results of my virtual audience surveys, I have concluded that **the arts can and do play an important role in community engagement and environmental education and that in-person live performance is preferable to virtual, but when dictated by circumstances, creative approaches can be found to engage virtual audiences.** My Final MES Portfolio not only confirms this conclusion but offers specific tools and techniques for creative environmental education.

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PORTFOLIO CONTENT LIST

Appendix 1: *Walk This Way* Virtual Theatrical Hike (PowerPoint)

Appendix 2: *Walk This Way* Virtual Theatrical Hike (Spatial Chat Component)

Appendix 3: *COP 25 (Madrid) UN Climate Change Summit* Report

Appendix 4: *COP 26 (Glasgow) UN Climate Change Summit* Zoom video

Appendix 5: *Project Drawdown*, Penn State Conference Report/Presentation

Appendix 6: *Rural Climate Solutions in Eden Mills & Oxford County* Presentation

Appendix 7: *Gaia* Street Theatre Script with Photos

Appendix 8: *Senior Citizen Sit-Ins* Photos and Media Release

Appendix 9. *She Won't Come in from the Garden* One-Woman Show Script, Program. Video of performance too large to upload to York U Dossier system. Can be viewed in Vimeo at: <https://vimeo.com/manage/videos/693655904>

Appendix 10: Reconciliation to *ReconciliACTION* (notes to accompany PowerPoint, which was too large to download to York U Dossier system. Can be viewed at this Google Drive link: https://drive.google.com/drive/folders/1nLzwQaOh_QjCfO-Bt2BmK3qFS-wi2y8x

Appendix 11: *Three Decades of Community-Engaged Arts* Presentation

Appendix 12: *Cowgirls & Indians* Script Synopsis and Photos

Appendix 13: *Emergency Poems (written during the Covid Pandemic & Climate Crisis)*

Appendix 14: *Turtle Island Acres Experiential Land-Based Learning Project Overview*

Appendix 15: Promotional Flyers (3)

Appendix 16: Virtual Theatrical Hike Survey Results & Analysis

Appendix 17: PhD Letter of Support