

Using Life History In The Teaching of Environmental Sustainability : Applying Placed-Based Learning To Integral Development



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Does using materials that take a life history approach to the teaching of environmental sustainability, including a Garden-Based Learning (GBL) Program (see Cornell University), help engage elementary students with the environmental realities of today? Substantiating this statement forms the focus of this article, which is part of an ongoing community school project that will be evaluated in June, 2013. By situating life

history within education practices we are able to reflect on life teachings passed down from previous generations and life teachings we wish to pass on. According to Neilsen (1998), daily life is an important source from which to draw research questions. Educational opportunities open up new possibilities for doing real research with important consequences and implications for the researcher and participants (p. 143).

In using various Life History approaches students are exposed to a variety of learning techniques (e.g., narratives, film, poetry and photography) that ordinarily may be overlooked as powerful tools to engage learning in the classroom. This, combined with a place-based approach to education using experiential learning, promotes elementary student development with regard to transforming attitudes and practices in relation to the environment, laying the groundwork needed to affect social change. This combined approach is crucial if our new generation of students is going to be able to cope with the enormity of environmental problems ahead. By using place-based learning (Smith .2007) with a life history orientation, students are provided with the opportunity to critically analyze and solve problem-posing situations regarding the environment which will impact directly the future choices they make. Therefore the objective of this project is to examine how using materials that take a life history approach to place-based learning impacts integral development in elementary school students with a specific focus on the teaching of environmental sustainability.

Exposing students to place-based education according to Smith (2007, p. 203), is grounding learning in a sense of place through investigation of the surrounding natural and human communities. As a term, place-based education is relatively new, although as a concept it has been around for more than 100 years and it usually includes conventional outdoor methodologies as advocated by educators like John Dewey who

stressed that “Experience has its geographical aspect, its artistic and its literary, its scientific and its historical sides. All studies arise from aspects of the one earth and the one life lived upon it” (1916, p. 91).

Integral development is one of the central components of transformative education theory, as advocated by transformative educators such as Edmund O’Sullivan (1999) and Thomas Berry (1988), which precludes that in order for transformation to occur an understanding of the interrelated principles of integral development is required in order to raise personal consciousness. Such understanding is self-determining in that as we grow internally and progress in time we determine the health of our values. Therefore the application of place-based education methodologies to the teaching of environmental sustainability results in the contextualization of learning which nurtures integral development.

The Project

In September 2012 I embarked on a journey to bring a Garden-Based Learning program (GBL) (see Cornell University) to elementary students in Prince Albert (PA). A rationale for this undertaking included my love of gardening and the need to re-engage children at the elementary level with nature and place-based learning. I have lived in PA since 2001 and have worked for the Saskatchewan River's School Division since 2003, during which time I realized that we did not have any programs available in our schools that engaged elementary students with GBL. Late this summer I was approved by my School Division to work with 26 grade five students at a community school on Day 1 in a 6-day cycle at 11:00 -11:40 a.m. (period four). The time allocated is logged as "Life Science" and is a precious 40 min slot.

In the past 10 weeks of explorations with students at this community school, we have set up a productive indoor green house, gone on field trips, and engaged in much critical thinking regarding our understanding of the environment and our own existing practices. Exposing these students to the life history of living legends like David Suzuki has been most encouraging. However the most significant use of life history in this project thus far can be seen through the story of "Jessy's Garden" and how this story is transforming the lives of those who are touched by its ongoing work, a story I will expand upon at a later time in this essay.

GBL can be defined simply as an instructional strategy that utilizes a garden as a teaching tool (see Cornell University). It provides integrated cross-curricular learning activities through active engagement in real-world experiences that bring abstract concepts to life. The pedagogy for this project is based on place-based experiential education, which is applied in the living laboratory of the garden and connected to individual students' learning styles and developmental levels. The hope is that through the use of place-based learning, an opportunity will be provided for elementary school students to investigate their role in environmental sustainability and to investigate the impact of this sustainability on integral development.

Living Legends

David Suzuki has an amazing ability to distil complex ideas into concrete examples. I find students really connect with his writing, and I'm pleased to say that he has become a recognizable feature in this project. He has a way of telling stories that illustrates the interconnectedness of all of the elements of this planet and their interdependence. In questioning how we can continue to shift towards a more integrated and holistic approach as we recognize the interdependence of species, Suzuki asks us to find a new path by

returning to our old ways. In his book *The Legacy*, Suzuki (2010) highlights that we have lost our reverence and that as a result, we no longer allow nature to guide us in our decision-making. Suzuki also makes reference to Rachael Carson's work on reductionism, a reference that provide insights for our current education system by acknowledging the interdependence of subject-integrated learning experiences across disciplines. Re-engaging students with nature by returning to "our old ways" is exactly what this project is about. Suzuki forms an acceptable source of knowledge that can be openly discussed in the classroom especially at a grade 5 level and offers a great text to engage students into thinking about their own legacy. However, I am in the process of trying to obtain permission to reference other environmental activists like Paul Watson in the project, but discussion is ongoing as to the appropriateness of particular texts.

Jessy's Garden

Jessy Plaskitt–Atkins was, according to her mother, a sassy little girl with a heart of gold (McEwen, 2012). Jessy had the utmost compassion for those less fortunate than herself and often gave more than she could afford to the homeless, organizing blankets and food drives for many on the streets of Toronto. In July 2008 at the tender age of 21 Jessy committed suicide. After the loss of their daughter, Bonnie and Mel Sanderson started a memorial vegetable garden in her honor. This organic garden is situated 21 km just east of PA and allows people of all ages the opportunity to pick organic vegetables for \$10 a bag — if they can afford it. In a personal interview with Bonnie Sanderson (personal communication, 2012), she elaborated: “If we get a family that’s really low income, we supply their food. We won’t charge them for the food that they take.” Bonnie says she understands what it’s like to be in a low-income situation because “circumstances change people.” “A lot of people look down on people that are of a lower income — I’ve been there and it’s ... you lose your job and

you lose everything after that,” she said. “That’s why I feel this is so important because there’s so many people out there.”

As of this year, Bonnie estimates the garden serves about 500 families, individuals and agencies. “We just sell the vegetables to help us with the fuel (and) our seeds because next year we have to get bigger,” she said. “The need is so great here in Prince Albert and area because we have people coming from Whitefish, Melfort, Nipawin, we’ve had people from Candle Lake, Christopher Lake — all around.” The agencies that often come to Jessy’s Garden for vegetables include the Children’s Haven, Salvation Army and Co-operative Health. Bonnie admits that she and Mel struggle — as the profits from the vegetables are put directly back into the garden. It was difficult for the couple since their house lost a basement wall last fall due to flooding and they were required to relocate to a trailer on their property. Yet, the Sandersons believe that they were meant to have this garden to help others and that Jessy's spirit lives with the garden. This year Jessy's garden had five acres full of a variety of vegetables with over 7,000 lbs. of carrots being produced alone.

In early October our 26 grade 5 students went out to the garden as volunteers to help harvest the enormous crop and they all went home with a bag full of vegetables. In their reflective writing journals, students were asked to reflect on this story, their experience in the garden, and how the work being done by Jessy's garden has changed/impacted them. Reading their journal entries, I was astounded by the feedback and felt an overwhelming sense of pride in the work I was doing. This life history curriculum has enriched the lives of everyone it has touched and has become part of my own personal journey. The connections to learning and the community have nurtured themselves through growth, life, kindness and humanity.

Using Photo-Voice as Life History



A Rare Find

Bonnie Sanderson is holding a salamander found nestled between the furrows of carrots during harvesting. Suzuki (2010) explains the interconnectedness of nature surrounding us. In no uncertain terms, Suzuki highlights the inseparability of people and the world of nature. Experiencing the natural world in this way helps students form the connections needed to appreciate their role in the larger scheme of things.



Hands On

This is place-based experiential learning in action... the feel of the mud in their hands; the sheer delight of seeing the bright, beautiful orange carrots emerge from the earth and the wonder of how it is possible was priceless. Many of these students never knew how carrots grew. Their memory of 'fresh-produce' comes from a store. Many couldn't resist eating the vegetables straight from the ground, commenting on how sweet and wonderful they tasted. This experience has forever changed their own life history.



Life In A Cup

Amidst the stark reality of Saskatchewan's harsh winter elements, life continues to thrive. If life is nurtured in a balanced way nature sustains itself. In this assignment students had to nurture "Life in a Cup". The growing of grass can be seen as symbolic of hair. It has to be cut, nourished and maintained – just as all living things have to be sustained. This “life” was totally their responsibility and they were graded on their creativity and effort. "All across the planet, trees— in a wonderful profusion of form and function—literally hold the world together" (Suzuki & Grady, 2004, p. 1).

Motivation for this Project

According to the Canadian Education Association (CEA, 2011) the research is clear: it is the quality of teaching that makes the most difference to student outcomes. By actively engaging students in growing a garden they become educated on where their food comes from and what the human factors are in this cycle. Students are redirected toward the social and natural environment through hands on experience which is in keeping with Suzuki's (2010) illustration of the interconnectedness of all of the elements of this planet and their interdependence. This is a direct move away from what Nespor (2008) terms a "Standardized Place-less curriculum." Impacting directly on integral development, students become

instrumental in the sustainability of their own environment and learn the essential tools for survival in the process. Research findings out of Cornell University (see Cornell University) have identified six key benefit areas of GBL for children: nutrition awareness; environmental awareness; learning achievements; life skills; health & wellness; community building and social connections. Suzuki (2010) directs us to the conclusion that despite our ability to have a profound impact on the earth, we cannot separate ourselves from the natural world, “or from its fate” (p. 64).

Conclusion

With the realization that our students are inheriting a host of escalating environmental challenges which include: climate change; depletion of resources; environmental degradation; obesity; diabetes; asthma and other environmentally linked illness, the onus is on educators to responsibly engage students with specific tools to cope if we expect this generation to take ownership as advocates and activists. Kennelly (2009, p. 127), focuses specifically on young activists by asking the following question: Who is responding to current urgent social issues, and how are these responders both regulated by and resisting the wider cultural forces within which they navigate? By using life history techniques students are exposed to powerful tools of knowledge production that may ordinarily be overlooked. Targeting elementary students through the school curriculum makes this project unique, as previous research/projects within the Saskatchewan context have primarily focused on place-based eco-initiatives amongst high school students.

Tuan (1978) suggests that children have to be taught by adults about their natural environment, as “Nature is an inarticulate teacher”. Children show a natural curiosity about the world, but this curiosity can be easily repressed if adults fail to nurture it. Using a transformative learning framework in the teaching of environmental sustainability requires the

teacher to acknowledge that as we progress in time we determine the health of our values. This is in keeping with the 2008 Saskatchewan Learning document entitled "Renewed Objectives for the Common Essential Learning of Critical and Creative Thinking (CCT) and Personal and Social Development (PSD)". This document recommends numerous fundamental changes to existing educational policy, more predominantly in emotional, social and spiritual aspects, as seen through environmental awareness, creative-ability development, and community-based achievement, and the document validates the need for transformation.

Such transformation develops the multifaceted concept of 'wholeness' regarding one's self, which reaffirms Suzuki's (2010) concept of moving towards a more integrated and holistic approach. With the implementation of ideals from this document, a paradigm shift has occurred which impacts directly on how educators are supposed to impart knowledge as well as the type of knowledge being imparted. Here is where using life history techniques challenges the traditional notions of what we know as knowledge. Stuckey (2010), asks us to "reassess what it means to know, what counts as knowledge and who can be recognized as a knower", (p. 187).

Using materials that take a life history approach to the teaching of environmental sustainability definitely helps engage elementary students with the environmental realities of today. Neilsen (1998), coined the phrase "kitchen table inquiry", which highlights that ordinary activities may generate fruitful research and focus on disrupting the distinctions we have learned to make between work and our lives. Hence, the use of Garden-Based Learning maybe seen as an unconventional source for knowledge generation. However, it is an approach that is engaging student learning by enhancing achievement and productivity.

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