

## Investigating Educators' Attitudes Toward Eco-Art Education

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### **Abstract**

This pilot study explores intersections of art and environmental education in the emerging field of eco-art education, which promises an innovative approach to developing ecological literacy and environmental awareness. By bringing together theoretical and methodological concepts from environmental education and art education, this study tested a research method for investigating elementary educators' attitudes and practices about eco-art education, provided preliminary data on the questions, and pointed to possible directions for curriculum development and support in future.

### **Resumé**

Cette étude pilote examine les croisements entre l'éducation artistique et l'éducation environnementale dans le domaine naissant de l'éducation éco-artistique. Ce nouveau domaine propose une approche novatrice pour le développement de la culture écologique et la sensibilisation aux questions environnementales. Une méthode de recherche a été mise à l'essai dans le cadre de cette étude afin d'examiner les attitudes et pratiques des enseignants en éducation éco-artistique au primaire, basées sur la fusion des concepts théoriques et méthodologiques issus de l'éducation environnementale et de l'éducation artistique. Outre la collecte de données préliminaires, cette étude propose certaines orientations potentielles pour l'élaboration de programmes d'études et leur mise en œuvre à long terme.

Over the last few decades the field of art education has witnessed major shifts in theory and pedagogy, including comprehensive arts education, discipline-based art education, multicultural and cross-cultural art education, and more

Recently, visual culture art education. Echoing the philosophical developments of postmodernism, these changes reflect a growing trend on the part of the visual arts and art education to move beyond the insularity of modernism and engage itself more fully with the world that surrounds it. While found in many contemporary approaches to art education, proof of this is most certainly found in an emerging field known as environmental art education. Also referred to as eco-art education, this field integrates environmental education and art education as a means of developing learners' awareness of and engagement with environmental issues, which many consider central to the continued existence of life on this planet. Eco-art education promises an innovative approach to fostering ecological literacy and the principles of environmental education, one that complements environmental education's traditional roots (found in the cognitive, positivist approach of science education) with the more creative, affective and sensory approaches of art education.

My own involvement in eco-art education stemmed from a growing frustration with the limits of a modernist approach to art education. Standard art lessons, such as making colour wheels and practicing two point perspective, left the teachers and students I worked with as a consultant questioning their value outside of the classroom. Suzi Gablik's book (1991), *The Re-enchantment of Art*, proved to be pivotal reading for me. It calls for an approach that revitalizes art-making and art education by contextualizing them within the most pressing issues of our time. Her ideas offered a way to integrate my strongly held environmental beliefs with my equally deep convictions about the value of art education, and pointed to a new research agenda for me in eco-art education.<sup>1</sup>

While my search for existing literature in this field took me back to the early 1970s (one of the earliest I found was Neperud, 1973) there have been a number of texts written in the last decade that have begun to explore this emerging discipline (Gablik, 1991; Blandy & Hoffmann, 1993; Lankford, 1997; Garoian, 1998; Ulbricht, 1998). The majority have been written from theoretical perspectives (providing a rationale for the existence of eco-art education) or from pedagogical standpoints (delineating how to teach it in the classroom). While a few informal studies have been conducted in this area (Neperud, 1997; Holmes, 2002), none have explored the attitudes and beliefs of elementary and secondary educators who are being encouraged to present eco-art education

in their classrooms. As the successful implementation of this field rests with practicing teachers, it is imperative that their voices have an opportunity to be heard early in its development.

As part of my doctoral research, I chose to undertake a pilot study to take tentative steps to rectify this situation. Its aims were two-fold: first, to devise a means of giving voice to practicing educators about the potential development and implementation of eco-art education in elementary school settings; and second, to create a means to collect preliminary data about the attitudes and beliefs of elementary educators in regards to eco-art education. The latter allowed me as a researcher and curriculum writer to test the validity of some of my own assumptions in this area, and to identify questions and directions for future research.

The theories on which eco-art education is based are not new; a growing number of educators have called for a closer relationship between science and art. The most cogent arguments in this field have appeared in the last decade, aligning with other shifts in the field of art education calling for a higher degree of social relevance for art education programs. One of the most vocal proponents has been Gablik (1991, 1995). She argues that Modernist art has a "nonrelational, noninteractive, nonparticipatory orientation" (1995, p. 80) that feeds a culture of capitalism and consumption, ultimately "condemning art to social impotence" (p. 74.). As an alternative she calls for an art that is less autonomous and more centred on dialogue, one that de-emphasizes individual creativity in favour of collaboration and inter-dependence. By better connecting art to the realities of daily living, she argues that art can be used effectively as an agent of social change, one that captures the public's attention through its creative, innovative approaches to social problems. As part of this agenda, Gablik (1991) promotes the importance of artworks that address environmental issues as a means of raising the public's awareness of and involvement in these issues. To this end she describes the eco-artmaking of Joseph Beuys, Mierle Laderman Ukeles, Ana Mendieta, Andy Goldsworthy, and many others.

By the mid 1990s, art educators inspired by Gablik's ideas began building a rationale for linking the teaching of art with environmental issues in elementary and secondary schools. Blandy & Hoffman (1993) argue for an approach to

art education that better promotes an understanding of inter-dependence and inter-connectedness of all life, while Lankford (1997) promotes art education's role in ecological stewardship. Hollis (1997) highlights the need for an art curriculum based on ecological issues, and provides examples of artists working from ecological perspectives to inspire educators to move in this direction. Ulbricht (1998) traces his own evolution of thinking in relation to environmental art education from a modern to a postmodern approach that positions art in an active role in bringing about positive environmental change. From a more theoretical vantagepoint, Garoian (1998) convincingly argues that the roots of European artistic practice promote exploitive attitudes and behaviours towards the environment, and proposes five metaphors of how the canon of western art taught in the schools continues to support an ideology of human domination of the earth. Many of these same educators take their arguments one step further by proposing a variety of means by which eco-art education can be taught (Blandy & Hoffman, 1993; Garoian, 1997; Neperud, 1997; Lankford, 1997).

Not surprisingly, the calls for the development of eco-art education have been echoed by theorists and educators in environmental education. Orr (1992) and Colwell (1997) argue that ecological literacy will not flourish in schools unless it becomes more interdisciplinary than its current science-based approach; they claim that learning in and through the arts would help fill this gap. Others, such as Morrone et al (2001), add to this by recognizing that environmental education is about much more than the transmission of factual knowledge, but also involves the acquisition of values, attitudes, and skills that encourage environmental action. Drawing from the strengths of art education, eco-art education could be used to help learners develop expertise in these areas through an examination of their own values and beliefs in the context of their relationship with the natural and built world.

While helping to build the definition of and rationale for eco-art education, what is missing from these mostly theoretical writings are research studies to explore key issues in depth, such as whether there is a need and/or desire on the part of practicing educators to teach eco-art education in their classrooms. A few informal studies have taken place (Neperud, 1997; Holmes, 2002), however none that solicit direct feedback from the very people who would be implementing learning in this area. Secondly, no rigorous studies exist to

investigate the efficacy of eco-art education in a more general sense, including examining how many programs exist in this area, and how are they received by students. What role do eco-artworks play in these programs? Do they, in fact, help bring about positive changes in attitudes towards environmental issues, and does this play out in learners' environmental behaviours? Some work has been done in these types of efficacy issues in environmental education studies (see Leeming et al, 1993, for an excellent meta-analysis on this topic) but none in eco-art education itself.

To begin to rectify this situation, I selected two questions for this pilot study: (a) What are the attitudes, beliefs, and assumptions of elementary teachers in regards to eco-art education? (b) Can information on this topic be gathered effectively through interviews? I utilized a qualitative approach by using teachers' attitudes and beliefs about environmental education and eco-art education as a starting point for informing the development and implementation of curriculum in this field. While similar studies in environmental education have been conducted using survey methods to synthesize the quantitative responses of a large number of participants, this study took a different tack by borrowing an approach more commonly found in art education and ethnographic research, a standardized open-ended interview format. By responding to focused questions, participants were asked to reconstruct their past experiences with arts-based learning experiences in environmental education, and articulate attitudes, beliefs and assumptions that informed those experiences. I was hoping that this method could result in a richer set of data than typically found in surveys, perhaps shedding new light on art and environment curricula.

While ethnographic researchers often recommend multiple interviews with each of a study's participants to provide a richer set of data (Seidman, 1998; Lutrell, 2000), the restricted timelines of this pilot study made this untenable. Just one interview was conducted with each participant. This proved sufficient to allow participants time to respond to the research questions, and provided enough data to conduct a thematic analysis. However, it did not provide an adequate opportunity for participants to engage in deeper recollection and reflection. Four elementary educators agreed to participate, which provided a good starting point to begin to answer the preliminary research questions.<sup>2</sup>

Standard protocols were followed in the interviews. A list of questions for the interviews was devised after reviewing selected resources on interviewing techniques (Seidman, 1998; Luttrell, 2000). Each participant was asked to sign a consent form in which I ensured their anonymity and my ethical use of the data. Little information about the topic of the interview was given in advance. The interviews were taped-recorded so that the interviews could be reviewed a number of times to identify common patterns and themes in the participants' responses. Detailed notes were made about participants' responses and then subsequently analyzed. As with any interview situation, my presence during the interviews may have had an effect on participants' responses (and similarly on the analysis phase) as the qualitative data collected relied heavily on my involvement in its analysis and interpretation. I strove to minimize these effects, (by tape-recording the interviews, for example) rather than assuming that they could be eliminated altogether.

The four participants, Julie, Karen, Sara, and Catherine (pseudonyms) are all elementary teachers in public school settings, teaching students from grade two up to grade four. They come from varying educational and cultural backgrounds, and brought with them a range in years of teaching experience, from a novice teacher in her first year in the system, to a veteran with twenty years in the classroom. Despite their varying backgrounds, I found many commonalities in their attitudes and beliefs about art education, curricular integration, and eco-art education.

All of the participants cited similar concepts at the heart of their art programs, including the exploration of the elements of design, the introduction of a variety of media and tools, and a desire for students to experiment with visual modes of self-expression. All of the teachers declared their use of art in curricular integration. They described integrating their art lessons with other parts of the curriculum, such as language arts (book-making, book illustrations, posters,) social studies (art from other cultures, social issues,) science (art-making about animals, habitats, insects, and land formations as subjects,) and math (tessellations and tangrams). All were enthusiastic proponents of integration. Julie declared that "she can't not do integration" because "integration makes learning more meaningful." Even though the participants had a harder time recalling integration they have done between art and outdoor education or

environmental education, all were able to remember some occasions in the last year when they had attempted these types of activities (such as sketching outdoors, mapping, looking for the elements of design in nature, or working with natural and found materials).

The four participants described themselves as environmentally aware, but listed varying degrees of being environmentally active, from few environmental actions taken, to using the 3Rs (recycling, reducing, reusing), to composting and reduced consumption. None had received professional development as teachers in environmental education, but the more experienced educators had learned about it on field trips to outdoor education centres with their students. Even though none of the participants regarded themselves as particularly knowledgeable about environmental education, they were still able to identify environmental concepts that they teach to their classes, including the 3Rs, conservation and preservation of nature and animals, sources and reduction of pollution, and resource management. Most of the educators emphasized age-appropriate actions and concepts for children on environmental issues, which Karen summarized succinctly. She teaches a concept of:

caretaker of the world...the idea that we have limited resources, that we're all responsible for preserving what we have and making sure that it's equitably shared...it's about responsibility, respect...and the idea for children that little things can make a difference...I'm trying to raise their awareness of the little things that they can do on a daily basis.

All acknowledged the lack of a document outlining the environmental education expectations in the Ontario curriculum, but were able to identify specific expectations in other subject areas that address environmental education issues or concepts. The four participants could describe ways in which they teach these concepts to their classes currently, often stemming from science

and social science content. All believed that environmental education does play a role in elementary classrooms. Karen was able to describe how it does on a daily basis, and Julie discussed how she teaches it indirectly (integrated with other subjects and through modelled behaviour) rather than as specific units or lessons, (an idea shared by Sara and Catherine.) Three of the educators identified a significant barrier to doing more in environmental education — lack of time. While all could agree on the importance of environmental education, they also perceived a lack of time to achieve all they wanted with their students. This applied in all subject areas.

#### **Attitudes about Eco-Art Education**

Interestingly, when all four participants were asked if they had introduced environmental issues via the arts in the past, they responded in the negative, despite their examples of this earlier in the interview. As they reflected on these responses, however, all four were able to cite at least one example of an activity that could be categorized as such, for example, junk art sculptures or drawing images of the local environment. None had heard the term eco-art or environmental art education before, but all could cite at least one example of eco-art (typically describing artworks that were made with recycled or re-used materials.) Once a definition of eco-art education was offered,<sup>3</sup> all four educators stated their beliefs that there was a place for this in the schools as it could help raise awareness of environmental issues. They were able to identify some of its potential advantages; for example, Julie linked it to her more fundamental beliefs about art education in general by saying that “the fact that they would be doing it through art, the learning would stay...because any learning through the arts, it’s the kind of learning that really does stay with kids.” Karen, on the other hand, saw a connection between eco-art education and her motivation for being a teacher: “I think there’s a lot of benefits...if I go back to my idea of why I went into education, I mean I really want to help make it a better world; how are we going to go that? By addressing environmental issues daily; I’d like to see how to integrate that better with art.”

The participants articulated some of the drawbacks of eco-art education. Time was considered a barrier as the curriculum is already overloaded. As a new teacher, Sara stated that “adding to the load is a frightening idea.” Julie was more

concerned about a moral drawback: “There’s a moral part of it...you wouldn’t want incorrect information or a teacher who doesn’t really care that much about the issues...you have to be careful that teachers are on board and are teaching it in an accurate way.” The most commonly voiced drawback, however, was that all of the educators felt ill-prepared to teach eco-art education. While all believed it to be a valuable undertaking, they felt that they lacked knowledge and resources to help them implement it.

When asked about the types of professional development or resources they might like to have in this area, three of the four identified experiential workshops as their preferred mode of learning. They recognized the lack of professional development opportunities in their board as a challenge however, which currently has only one paid day per year. Two of the educators noted the value of artist-in-the-schools programs as a means of professional development. They felt that artists introduced students to essential concepts while simultaneously modelling teaching strategies to classroom teachers.

Only one of the educators was aware of any print resources available in this area, (a magazine suggesting nature and art activities from Australia). None of the others were aware of existing resources. Two of the educators acknowledged the huge amount of literature they already receive from their board, and preferred to have access to a reliable, reputable website, with a strong visual component, that would contain instructions and/or lesson plans for eco-art activities,

The thematic analysis provided a number of insights into the study’s key questions. It was apparent that attitudinal information about eco-art education could be collected from educators effectively through an interview method, even though they had not heard the term before nor had taught what they considered to be eco-art lessons. The interview format did result in a type of data different from that generated by surveys. While not as statistically reliable as that drawn from large scale surveys, it did provide a means of giving educators an opportunity to recount and reflect on their own teaching and learning experiences. The method resulted not only in attitudinal data on art and environmental education pedagogies, but also honoured the individual voices and contributions teachers make to the development of

these pedagogies. These are some of the benefits of qualitative methods, and therefore environmental education researchers might benefit from a closer look at these types of research methods and consider utilizing them in conjunction with the hard sciences research methods more typically used.

A second group of insights, focusing on the attitudes and beliefs of teachers about eco-art education, was drawn from the data. The basic premise on which eco-art education is built, curricular integration, appears to be alive and well in these educators' elementary classrooms, and therefore potentially in others. Rationalizing curricular integration may not need to be central to the implementation of eco-art education, then, if it is already in common use. As part of this integration, it came as a surprise that these educators were already experimenting with eco-art learning strategies, even if they didn't consider them as such. This knowledge may make it easier to raise teachers' notions of self-efficacy in eco-art education if they can be convinced that common learning activities (such as sketching outdoors and working with natural materials) can be considered part of an eco-art approach.

It was also encouraging to hear enthusiasm and support for environmental education and eco-art education from generalist educators. All of the participants were able to conceive of its potential benefits despite a lack of examples of eco-art to draw from, and feelings of low self-efficacy in relation to teaching both fields. It was equally encouraging to hear that these elementary teachers had a grasp of basic environmental concepts and pedagogies, and understood that expectations from a variety of subjects in the Ontario curriculum related to these ideas. Again, this makes eco-art education a potentially easier concept to promote to teachers if they have a grasp of environmental basics and an awareness of how it meets curricular expectations.

A final insight drawn from the interviews concerns the potential barriers that may problematize the implementation of eco-art education in future. I refer specifically to a lack of both instruction time and professional development opportunities. Teachers in Ontario deal with an overcrowded curriculum, and adding to the load, as these educators voiced, is not a welcome idea. Instead eco-art education will have to be conceptualized in a different way, one that reduces curriculum load rather than adding to it, as a means of simultaneously

achieving expectations in the visual arts, science, and social studies, for example. But for successful implementation, eco-art education will have to be supported by the provision of professional development opportunities. These educators were quite clear in their need for experiential workshops or in-class expert modeling to improve their feelings of self-efficacy. This could in turn be supported by web-based or print resources to support their learning.

Returning to the original aims of this research, the interview method did prove valuable in collecting qualitative data from elementary educators on the topic of eco-art education, and did result in a different type of attitudinal data than typically collected through environmental education research. The interview questions, structured yet open-ended, provided a means for participants to recount their teaching experiences and reflect on them in a new light, offering them the opportunity to contribute to the development of eco-art education as well as feel validated in their existing pedagogical practices.

To a new researcher this study also proved fruitful, demonstrating that my assumptions about eco-art education are in line with the realities of elementary classrooms, and that there is a place for this emerging field in this context. It has also served to point to many avenues for continued research in this area, with practicing educators, teachers-in-training or with young learners. These could include studies on the effect of professional development workshops in eco-art education on teachers' conceptions of self-efficacy, attitudinal studies of teachers-in-training to environmental and eco-art education, or observational studies of how eco-art lessons are currently taught by generalist teachers. Another area that should be investigated is the efficacy of eco-art education programs once they have been devised and implemented. Environmental education research provides some models for efficacy research that could be utilized in this regard. Developing a better understanding of how they affect learners' attitudes, beliefs and ultimately behaviour towards environmental issues would be a valuable line of research. As a new field, there is much research still to be done; the most difficult choices will stem not so much from what questions to ask, but from which ones to start with first.

Notes

<sup>1</sup> There is no doubt that this field is built on an instrumentalist approach to art education. There are some art educators who disagree with this philosophical stance, arguing for the value of art education in its own right. Many others, however, are calling for a stronger connection of art education to its context; Anderson & Milbrandt's (2004) newest text *Art for Life* provides a convincing rationale for just such an approach.

<sup>2</sup> Inherent to this approach were a number of assumptions and limitations. I assumed that environmental education and eco-art education are appropriate and valuable subjects for the elementary level, and that teachers have some awareness of environmental education and art education concepts and pedagogy. Consequently they could discuss the nature of their experiences in a reflective manner, which could be captured in an interview. I considered generalist teachers to be reliable sources of information about the status of environmental education and eco-art education in Ontario schools today, and I presupposed that teachers would express their honest opinions in interview situations.

<sup>3</sup> Eco-art education was simply defined as an integration of environmental education and art education that develops learners' awareness of, and engagement with, environmental issues and concepts, together with those of art.

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Related Readings

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