

**The Sky is Falling:
An Examination of Ways to Heighten Young Children's Awareness of
Environmental Issues that Result in Increased Feelings of Self-Efficacy
Rather than Disempowerment and Fear**

A Proposal for Sabbatical Leave Research

By

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Abstract

The purpose of this sabbatical leave project is to explore the role of children's literature as the impetus for helping children to both think critically about pressing environmental issues and feel empowered and efficacious to work collectively towards change. It will be implemented in a suburban second grade classroom, whose principal has afforded her approval. Data collected will include a pre-post survey, transcriptions, writing samples, and digital pictures and videos. Data analysis will evaluate children's awareness and views towards environmental issues as well as their self-efficacy to promote change. Results of the study will be published and presented at local and national conferences as well as shared with local school districts. Results will also be woven into relevant college courses.

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Reading is not a passive activity. Rather, readers are constantly activating their schema, or prior knowledge, to interact with text and transform ideas about themselves and the world (Smith, 1985). Applying a critical literacy perspective, Mason described literacy as a process of “coming to self-consciousness,” where one not only discovers, but creates oneself (as cited in Mc-Gill-Franzen, Lanford, & Adams, 1997). In *Envisioning Literature* (1995), Langer discussed how students can learn to better understand themselves and their world through literature:

Inherent in the act of literacy understanding is the promise of touching the many-sidedness of human sensibility. It is through the envisionments we develop as we explore new horizons of possibility that we can at least begin to imagine the perspectives of others – in other circumstances, eras, and cultures – and be moved to make new sense of ourselves, our times, and our world (p. 145).

Big issues such as global warming, animal extinction, and rain forest depletion are often introduced to children through children’s literature. Teachers and children’s literature publishers have made significant efforts to better inform children about such issues. Unfortunately, the ways in which this information has or rather has *not* been presented may have often left children feeling scared, disempowered, and at times hopeless. Researchers have found that even adults react to feeling overwhelmed by too much information on environmental and social issues by shutting down or disconnecting (Macy, 1983). Furthermore, due to excessive reliance on technology and a reduction in both outside play time and field trips, children are developing what has been called Nature Deficit Disorder (Louv, 2005). According to Louv, lack of exposure to nature and environmental issues has been shown to have negative affects on children’s creativity, self-esteem, and attentiveness.

There are developmentally, individually, and culturally appropriate ways to discuss such issues with children that heighten awareness and efficacy rather than build fear and pessimism. Children's literature can serve as the impetus for critical classroom discourse that opens up optimistic ideas for change. Yet, simply reading about environmental issues may contribute to children's disconnect to nature. However, if these reading experiences come with a direct link to nature, as well as collective action to make positive change, children may feel empowered as individuals while working towards a common goal. It has been documented that children who feel connected to nature may also feel a stronger sense of self esteem (Crane, 2001).

Purpose

The primary purpose of this project is to explore ways to sensitively, positively, and collectively deepen children's understanding of texts, themselves, and their world including environmental concerns. Specifically, this study will explore the following questions:

- 1) How are children feeling about nature/the environment?
- 2) How can children's literature and critical discourse encourage rather than discourage children to feel connected to nature/the environment in a positive way and increase children's self-efficacy towards working for environmental care?
- 3) What is the correlation between children's views about themselves and their views about nature/the environment?

Theoretical Framework

The theoretical framework of much of the research in reading (e.g., Braugner & Lewis, 1997; McQuillan, 1998; Moustafa, 1997, Smith, 1985) suggests that literacy is not simply the comprehension of a text but a means through which individuals participate in constituting themselves and their world. From a multicultural perspective, students from non-mainstream cultures can profit from having opportunities for understanding and developing pride in their heritage and for building a positive self-concept. Furthermore, literature can be a vehicle to foster cultural awareness and appreciation. Our culturally

diverse population challenges educators to provide literacy instruction that reflects the variety of our students' experiences and backgrounds (Au, 1993; Routman, 1996). By tapping in to this research on the importance of multicultural literature and literacy one can see the value in using children's literature to explore environmental and consequently social issues. As children read such literature they are constantly making connections between the new information and their previous experience, knowledge, and beliefs. The discourse evoked when reading such literature is critical in helping children to make sense of the text, themselves, and their world (Christensen, 1997). It is through this discussion that teachers and children can develop self-efficacy towards environmental care.

Bandura (1986) proposed self-efficacy as a mechanism of cognitive self-evaluation that mediates skilled performance. He defined self-efficacy as a person's judgments of her or his ability to perform an activity and the effect this perception has on the ongoing and future conduct of the activity. Bandura (1986) believed that competent functioning requires both skills and self-beliefs of efficacy to use them effectively. He believed success is only attained after one generates and tests alternative forms of behavior and strategies. This problem solving requires persistent effort. Bandura believed that those who may have self-doubts about their abilities abort this generative process if initial efforts prove deficient. Thus, self-efficacy is expressed as personal confidence in the ability to successfully perform tasks at a given level. It is concerned not with the skills one has, but with the judgment of what one can do with whatever skills one possesses and determines the effort people will put forth as well as how long they will persist at a given task (Bandura, 1977).

Equally important to this research, is how Bandura (1986) distinguished judgments of personal efficacy from response-outcome expectations. Outcome expectancies are beliefs about contingent relations between successful task performance and perceived outcomes. Perceived self-efficacy is a judgment of one's capability to accomplish a certain level of performance; whereas an outcome expectation is a judgment of the likely consequence such behavior will produce. Outcome expectancies mediate task performance by providing a cognitive appraisal of the likely outcomes of successful task performance and the likelihood that successful performance will lead to the attainment of goals. Bandura

differentiates between efficacy and outcome judgments because “individuals can believe that a particular course of action will produce certain outcomes, but they do not act on that outcome belief if they question whether they can actually execute the necessary activities” (Bandura, 1986, p. 392). Therefore, a simple awareness that successfully completing a task will have a favorable outcome is not enough to engage a person who has serious self-doubts that they can master the activity involved.

Bandura’s work on self-efficacy is important to this research because he illuminates why simply reading about environmental issues to children can be not only ineffective but counter productive. Without critical discourse children can be left feeling afraid and helpless about environmental issues. These negative feelings may eventually develop into a sense of apathy or aversion. On the contrary, when discussions around these books center on possible and collective change, children realize “that they can actually execute the necessary activities” (Bandura, 1986, p.392). This realization is key to helping children to develop self-efficacy towards environmental change.

Research Review

Since I believe I have provided sufficient review of the research on reading, reading comprehension, and self-efficacy, I will focus here on reviewing the research on children and today’s environmental issues.

Numerous researchers and educators have valued to a great extent the role of nature on early childhood development. Maria Montessori believed that nature stimulates children’s powers of observation, fosters creativity, and instills a sense of peace and being at one with the world. Others have found that environmental learning can enhance children’s cognitive development, problem solving, decision making, critical thinking, and nurtures a sense of stewardship of the environment (Dewey, 1902; Gardner, 1999; Luera & Hong, 2003; Crane, 2001; Louv, 2005). Yet, even with this awareness children are spending less and less time both discussing nature and experiencing nature. In fact, recently a school district in Connecticut eliminated recess entirely in an effort to provide more time preparing for the Connecticut Mastery Test (CMT). Louv in his book titled *The Last Child in the Woods* (2005) highlights the irony that “at the very moment that the

bond is breaking between the young and the natural world, a growing body of research links our mental, physical, and spiritual health directly to our association with nature-in positive ways... As one scientist puts it, we can now assume that just as children need good nutrition and adequate sleep, they may very well need contact with nature (p.3).”

There has been some research published that focuses on the need for environmental education and a connection to nature (Malone & Tranter, 2003; Taylor et. al, 2002; Rivkin, 1997; Grant & Littlejohn, 2001; Sobel, 2004; Wagner, 2000; Louv, 1996). Yet, it appears that few have addressed the questions guiding this study.

Consequently, this research using children’s literature as the impetus for building a sense of compassion and connectedness to the environment is both timely and urgent especially as more and more schools may be seduced to eliminate recess under pressure from NCLB (No Child Left Behind) initiatives.

Research Methodology

Participants

The participants in this study will be second grade children in a K-5 suburban elementary school. I have discussed my research with the principal, Mrs. Bridget Braney, the school reading teacher, Mrs. Cathi Ober, and Mrs. Potamianos, second grade teacher at Orchard Elementary School in South Windsor. All three were supportive and enthusiastically willing to allow me to implement this research with the participation of Mrs. Potamianos’ second graders. Mrs. Braney has indicated her support in writing and copies of this paperwork are located in Appendix A.

This elementary school was chosen because of the continued emphasis, through the efforts of the principal and reading teacher, on providing professional development and support to teachers that encourages best practice in the teaching of reading. The present approaches to teaching reading at this school are based in the most recent research and are truly exemplary.

Mrs. Potamianos was recommended to me by the reading teacher. She is said to be highly effective at teaching reading and continually reflecting on her teaching practice.

Role of the classroom teacher:

1. To continue in her normal role as classroom teacher, planning and instructing the classroom.
2. To participate in whole class read alouds and discussions

Mrs. Potamianos will not be expected to do any additional planning or preparation.

Role of the classroom children:

1. To continue in their normal role as students in the classroom.
2. To complete a very brief pre/post survey.
3. To engage in discussions around the reading of children's literature that addresses environmental/social issues.

Role of the researcher (Theresa Bouley):

1. To locate reading material that depicts environmental and social issues in an **age appropriate manner** (with the approval of the teacher).
2. To administer a brief pre/post survey.
3. To participate during reading workshop at times as an aide to the teacher and children and others as a reader.
4. To engage children in discussions about the readings and issues presented.
5. To work with the children on extensions inspired by the children such as writing letters (persuasive writing), further research, fundraising efforts, etc.
6. To document children's discussions, attitudes and beliefs, and actions towards change and to share these with teachers, parents, and children.
7. To work with Mrs. Cathi Ober, school-wide reading teacher, in developing *requested* professional development to fulfill the needs of teachers in the areas of reading/writing instruction.

As the primary researcher I will be taking on many roles and responsibilities. I see myself as an observer, participant, and an aide in the classroom. My goals for the initial few weeks are to get to know the students, build trusting relationships, and learn the routine of the reading workshop. The first few steps of my research involve implementing my survey and reviewing possible books with the classroom teacher and reading teacher. Next and working with the teacher, I will begin to either participate in or facilitate reading workshops that include critical readings, discussions, and outdoor connections.

This will be highly beneficial to the children as there will now be two teachers actively facilitating children's learning. Book discussions will be taped and when possible I will be taking field notes of my observations as well as the children's comments. It is my hope that children take the initiative to work collectively towards environmental care. At that point, I intend to facilitate these projects and their follow through.

Data

The research design is both quantitative and qualitative.

For this project I have developed a brief survey to be implemented in a pre/post format. Please see Appendix B for the survey. The survey is designed to primarily address questions one and three of this study.

Question two will primarily be addressed with qualitative data that will stem from my classroom observations and will include transcriptions from the recorded conversations and field notes. In addition, work samples, digital pictures and/or video footage of student's responses to readings/discussions will also be collected.

Data analysis and synthesis

As mentioned, discussions will be transcribed and analyzed along with observation notes to identify themes. The data will be coded into one of the following four categories; 1) awareness / understanding of the environment/environmental issues, 2) feelings about the environment/environmental issues, 3) ideas of individual action/collective action for environmental change (self-efficacy), and 4) feelings about themselves (self-esteem/image).

Coded data will be analyzed thoroughly for emerging themes and the ways in which they relate to the three research questions, especially question two.

In addition and possibly most important, data coded under the category of *ideas of individual action/collective action for environmental change (self-efficacy)* will be tracked to determine if the data or comments made by students actually resulted in action. Observation notes from that extension or child-initiated action will also be analyzed and samples collected.

Quantitatively, a t-test will be run to determine any significant changes between pre and post survey scores.

Time Frame

During the 2007-2008 school year approval and permission will be sought from the principal of Orchard Hill School, the South Windsor Board of education, the Sabbatical Leave Committee at Eastern Connecticut State University, and the Human Subjects Review Board Committee at Eastern. The actual study will be conducted during fall 2008.

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| Oct.-Dec., 2007 | Share proposal with principal of Orchard Hill Elementary School and seek approval from the South Windsor Board of Education |
| Nov. 2007 | Receive approval from the Sabbatical Leave Committee at ECSU |
| Jan.–May, 2008 | Seek approval from the Human Subjects Review Board Committee at Eastern |
| April-June, 2008 | Remind teacher of the upcoming project and seek and receive permission from families |
| Sept.-Dec., 2008 | Conduct study at Orchard Elementary School |
| Dec.-Jan., 2009 | Complete data analysis and report |

Expected Outcomes

It is anticipated that reconnecting with nature and the environment will increase children’s self-esteem, self-efficacy towards change, and amount of time spent in nature. In addition, children will gain a better sense of collective action and learn to see themselves as part of a community.

Furthermore, children will develop as readers as a result of this study. During second grade the reading focus for most children goes from learning to read to reading to learn. The focus on comprehension and interaction with texts is both timely and necessary for these children as they evolve into proficient readers. Furthermore, there is a great deal of research that emphasizes the role of “book talk”. The critical discussions we will have will not only enhance the reading abilities of these children, but also the amount

of reading time as they will likely be intrigued to know/read more. Furthermore, anticipated extensions will allow for children to further develop research skills, communication skills, and persuasive writing skills.

It is anticipated that the teacher (and children) will benefit greatly from having a second teacher during reading workshop to facilitate children's learning. As mentioned earlier, this teacher's knowledge of the reading workshop approach has been evolving and she has a continued commitment to implementing best teaching of reading practice in her classroom. My knowledge in this area will benefit her in that way as well.

Along those lines, there are a number of ways in which this project will positively affect my teaching at the university level. As a teacher educator it is crucial that I remain in touch with children and classroom practice. In recent years I have increasingly focused on using children's literature in ways that address pressing social issues such as global warming, racism, poverty, and heterosexism. Sharing this research with my students will allow me to demonstrate how to put this theory into classroom practice.

Furthermore, due to the fact that the teachers at Orchard school are using the text I use for my courses at Eastern to guide their teaching of reading, I will be able to bring new learning and validation back to my students regarding best practice.

This is especially important today since so many schools are being forced to use reading programs that are not best practice but designed to increase mastery test scores. This research will be woven in to all four of my literacy courses but especially ECE 355: Reading and Writing in the Primary Years and ECE 507: Reading and Writing in the Primary Years at the graduate level.

I anticipate presenting the results of this study at several national conferences such as the National Reading Conference (NRC), the International Reading Association (IRA) annual conference, and the Reading the World Conference. I have presented at all of these conferences several times and feel confident in my ability to write an accepted proposal. I also plan to present this project at local conferences and schools.

I also intend to publish the results in at least two journals. The results of this research would be a suitable for the Early Childhood Education Journal or Early Childhood Research Quarterly, Environmental Education Research or Children's Environments Quarterly.

Ideally speaking, we would all benefit greatly from this research. Reconnecting children with the environment, further developing their sense of social justice, and helping them to experience collective action towards change can have positive results on their future and that of the world. In the least we might be able to allow our children the luxury of knowing that the sky is *not* falling, after all.

My Research Background

Currently I am in my seventh year at Eastern Connecticut State University and my second year as Associate Professor. I teach reading/language arts courses in Early Childhood Education. I graduated from the University of Connecticut in 2001 with a doctorate in Curriculum and Instruction with a focus in the areas of reading/language arts, early childhood education, and language, literacy and society.

My primary research interests center around critical pedagogy and multicultural literature/literacy. Recently I have focused on using children's literature as one way to help children to make sense of the times and develop a sense of social justice.

I have presented my work at numerous reading/language arts annual conferences including that of IRA, NRC (National Reading Conference), Reading the World, ACEI, AERA, and NERA. My work has been published in *Childhood International*, *Journal of Early Childhood Teacher Education*, and *Childhood Education*.

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