Storybooks: A Teaching Tool for Sustainability

Medress, Amanda Oberlin College Environmental Studies and Creative Writing Academic Director: Brennan, Peter Academic Advisor: Cevallos, Polly Sydney, Australia

Submitted in partial fulfillment of the requirements for Australia: Sustainability and the Environment, SIT Study Abroad, Spring 2008

#### Abstract

If today's children learn to make decisions with the environment in mind, tomorrow's future will be cleaner, greener, and energy leaner. Storybooks, which are a creative and imaginative learning tool, can influence children to pursue sustainable lifestyles. Early education through literature can help green decisions be the default mode for the next generation.

This project has two components. The first is to produce research on the following question: what kind of storybook instills environmental regard and motivates sustainable behavior? The second is to produce a children's adaptation of Greeniology, a green living guide by Tanya Ha, which utilizes the findings of the above research.

My research methods included analysis of literature on environmental education, analysis of literature on writing children's books, analysis of green storybooks and youth green living guides, interviews with authors and environmental educators, and brainstorming sessions with children.

The research determined that a positive outlook, clear and balanced factual information, and treatment of children as peers instead of inferiors are essential tenets of environmental education. Successful storybooks utilize humor, fanciful illustrations, and a main character that the reader can identify with and look up to. While environmental storybooks can reach readers emotionally and thus have a long-lasting effect, green living guides can pack in more information about environmental problems and solutions.

The final product, What Would Skinky Do?, utilizes the strengths of both fiction and non-fiction: it has endearing main characters and specific suggestions for a child-attainable green lifestyle.

Topic Codes Early Childhood Education (208) English Literature (312) Environmental Education (232) Thank you, Polly Cevallos, for your support, encouragement, and warm friendship. Without you I would not have believed producing and distributing a storybook was actually possible.

Thank you, Peter and Laura Brennan, for making this semester both academically stimulating and incredibly enjoyable. Because of you this program is a well-oiled machine, and I have appreciated the smooth ride.

Thank you, Elkington family, for teaching me about Aussie Rules, hooking me on vegemite, and generously providing me with a spot in your dynamic family.

Thank you, Wendy Goldstein, David Chapman, Alan Watson, Gary Crew, Phil McManus, and Juli Gassner, for giving me time in your already busy days.

Thank you, SIT peers, for the dance sessions, a bottomless sense of humor, and your admirable dedication to the enviro-cause.

Thank you, Mom and Dad, for letting me exchange an Ohio winter for a semester romping around in rainforests, beaches, sand blows, and bars.

1.0 Introduction	5
1.1 The Importance of Raising Environmentally-Aware Kids	5
1.2 History of Storybooks with Environmental Themes	5
1.3 Storybooks as a Pathway to Sustainability	
1.4 Statement of Problem	
2.0 Methodology	
2.1 Literature Analysis	
2.2 Interviews with Authors and Environmental Educators	
2.3 Brainstorming Sessions with Children	8
2.4 Writing the Book	
2.5 Assessment of Methodology	
3.0 Results and Discussion.	
3.1 The Current State of Kids and Nature	
3.2 Important Tenets of Environmental Education	
3.3 Overview of Environmental Storybooks	
3.4 Overview of Green Guides for Kids	14
3.5 Non-fiction vs. Fiction	
3.6 Effective Literary Techniques	
3.7 What Kids Want	
4.0 Final Product	
5.0 Reflection and Critique of Final Product	
5.1 Aim of Storybook	
5.2 Shortcomings of Storybook	
6.0 Conclusion	
6.1 Summary	
6.2 Suggestions for Further Research	
References.	21
List of Tables and Figures	
Table 1: Advice from Interviewees	17
Appendices	
Appendix A: Final Product, There's a Skink in the Shower!(se	e separate file)
Appendix B: List of Green Guides and Storybooks	-
Appendix C: Eco-Actions for Kids	

### 1.0 Introduction

Storybooks with environmental themes are a growing sector of the children's literature genre. The following sections outline their history and capabilities.

# 1.1 The Importance of Raising Environmentally-Aware Kids

As the state of the environment deteriorates, the need for an environmentally-conscious public deepens. Although sustainability education for all ages is important, it is arguably easier to teach children, who generally have open minds and routines, than to teach adults, who generally have engrained habits and philosophies. Early education is extremely important, as the next generation's attitude towards the environment will impact the future state of the earth: "how the young respond to nature, and how they raise their own children, will shape the configurations and conditions of our cities, homes, our daily lives" (Louv 2005: 3).

Early environmental education is especially crucial as children spend more time inside, with televisions and computers, than outside, in ever-shrinking backyards. "Increasingly, nature is something to watch, to consume, to wear—to ignore" (Louv 2005: 2). Increased time outdoors can positively impact children: exposure to nature actually decreases symptoms of ADD and improves resistance to negative stress and depression (Louv 2005: 34). Therefore, a stronger bond between children and nature is in the best interest of both youth and the planet's ongoing health.

## 1.2 History of Storybooks with Environmental Themes

The first Australian children's book, A Mother's Offering to Her Children, was published in 1841 (Saxby 2004). The importance of books in childhood education grew greatly after World War II, when support organizations (such as the Children's Book Council of New South Wales) and national book awards developed (Saxby 2004). In the 1960's the Australian government gave increased funding to school libraries, in the 1970's seminars for school librarians expanded, and in the 1980's Master's degrees in children's literature became available (Saxby 2004).

Since the 1970's there's been a growing eco-consciousness in the genre of children's literature (Pollack: 2000, 327). Whereas storybooks used to shield children from social and environmental ills, "authors are now willing to show kids the world and its problems, instead of a purely sunny untainted one" (Pollack: 2000, 327). While storybooks have traditionally incorporated some kind of lesson about personal morality, now the morals at issue are global in scope. "Where as moralizing in children's books used to be aimed at saving the souls of the young, it is now aimed at saving their lives—and the life of the whole planet—so its impassioned message is deeply urgent (Pollack: 2000, 354).

# 1.3 Storybooks as a Pathway to Sustainability

Storybooks are a potent teaching tool. Stories help students form bridges between a child's interior life and the life outside a child's home (Rives: 1997, 6). These bridges make science more accessible: "science is very abstract for youngsters and must be seen as part of their own personal world if it is to be understood and remembered" (Butzow: 1989, 3). Furthermore, by utilizing both words and pictographs, storybooks accommodate a variety of learning styles (Saxby: 1987, 76). By triggering the imagination, stories turn

learning into a recreational event. These factors give storybooks definite advantages over textbooks and lectures.

Because children have impressionable minds, storybooks can greatly influence a child's future character: "as children listen to stories, as they take down books from library shelves, they may...be choosing their future and the values that will dominate it" (Saxby 1987: 5). Therefore, it is no great surprise that many adults still have favorite books from childhood (Krailing: 2004, 2). Thus, if storybooks can teach children environmental values, these green values can stick with the person through adulthood.

### 1.4 Statement of Problem

Out of the wide range of available children's literature, which books will instill environmental regard and motivate action? I aim to answer this question through researching the most effective techniques in environmental education and children's literature.

The creative portion of this project is a green guide for kids based on the adult guide entitled Greeniology by Tanya Ha. Greeniology, which offers upbeat and clear advice for green decisions in every room of the house, aims to empower instead of dishearten. Ha gives readers practical ways to help the environment, as an alternative to standing outside in protestor lines. In her words, "there's a new wave in the environmental movement—defining its self by what it's for rather than what it's against" (Ha: 2007, xi). However, many of the books' suggestions (such as buying VOC-free paint and looking into alternative energy systems) are out of a child's realm of control. Therefore, the challenge of this project lies in identifying what decisions children do have control over, and to neither undermine their intellect nor set impractical expectations.

This adapted green guide will be featured on the Jane Goodall Institute's Roots and Shoots website (www.rootsandshoots.org.au). Roots and Shoots, which promotes concern for people, animals, and the environment, is a global youth network which helps young leaders design and implement their own projects. Current campaigns include tree planting, reusable bags, and flying recyclable peace puppets

### 2.0 Methodology

From April 13th to May 15th of 2008, I gathered information on environmental children's literature through five methods: analysis of literature on environmental education, analysis of literature on writing children's books, analysis of green storybooks and green living guides, interviews with authors and environmental educators, and brainstorming sessions with children. I conducted my research in Sydney because of its wealth of libraries and university professors.

# 2.1 Literature Analysis

I analyzed environmental education literature in order to understand how to distill scary, complex topics like global warming into information that motivates children to take action. I researched the mechanics of creating a storybook in order to understand how writing for children is different from writing for adults. I analyzed green storybooks and green living guides to understand what the genre currently contains and lacks: I

didn't want to create an adaptation too similar to something that already exists. I also wanted to get a feel for effective illustration styles and literary techniques.

I conducted most of my literature analysis at the State Library of New South Wales. Other libraries used include the University of New South Wales library, Fisher Library at the University of Sydney, the Stanton public library, and the Newtown public library.

I found books on children's literature and environmental education by doing basic searches on the libraries' electronic databases, which yielded more than sufficient results. I selected green storybooks and youth green guides by searching for titles in the children's environmental literature bibliography created by Wisconsin's Department of Natural Resources (available at

http://www.dnr.state.wi.us/org/caer/ce/eek/teacher/pdf/Literaturelist.pdf) and titles awarded with the Wilderness Society Environment Awards for children's literature. I also spent several hours in the children's sections of libraries skimming through all types of storybooks, in order to get a feel for illustrations, character development, layout, and pacing.

## 2.2 Interviews with Authors and Environmental Educators

I chose to interview professors and authors in order to get a sense of which environmental values are most important to translate to children. I reasoned that professors, because of their first-hand experience in communicating environmentalism, would be able to suggest effective environmental education techniques.

I requested interviews with faculty from the University of New South Wales, Macquarie University, and the University of Sydney who had web pages that described an interest in children's literature or environmental education. The emails I sent out yielded a low reply rate, probably because professors have their own students to dedicate time to.

I also requested interviews with authors I admired that live in Sydney (email addresses found through web searches). This pursuit was unsuccessful.

### 2.3 Brainstorming Sessions with Children

I was not planning on working with children, but when two contacts offered to set up focus groups I took advantage of the opportunities. These sessions allowed me to understand how children perceive the natural environment, why they care about the natural environment, and what types of books they find engaging and humorous.

The first brainstorming session was conducted on May 6th from 11am to noon at Kinma School in Terrey Hills, facilitated by Juli Gassner. It involved five children between ages eight and 11. During this session I asked the children why they cared about nature, what sort of things they did to help nature, and what characteristics their favorite storybooks have.

The second brainstorming session was conducted on May 10th from noon to 3 pm at Whale Beach, facilitated by my advisor Polly Cevallos. It involved six children between the ages of five to 12, who discussed the same questions as above.

### 2.4 Writing the Book

The first two weeks of my project I brainstormed a list of possible book ideas and characters. During the third week, I wrote and illustrated a rough draft of the book, which

my advisor and friends gave feedback on (including suggestions about what vocabulary needed to be translated from American to Australian). I also went through this first draft with children at the second brainstorming session. They offered me advice on how to make the main characters more interesting and Australian. During the last week of the project I produced the final copy.

## 2.5 Assessment of Methodology

This research was slightly limited by the books available at local libraries. Although I found plenty of information on the separate topics of children's books and environmental education, I did not find much specific information on environmental children's literature. Although this is a burgeoning field with limited research, there are several recent and subject-specific books that I could not find in Sydney libraries.

The research could have also benefited from a more extensive survey of what children like in books. However, I avoided surveying children because I did not have sufficient time to get parental consent.

I originally aimed to visit multiple environmental education centers in the Sydney area. I did visit one, the Observatory Hill Education Center, and co-director Glen Halliday gave me useful information about the center's programs. However, since their program was not directly related to children's literature, I decided further visits to environmental education centers would not be a lucrative use of time.

One of the most useful methodologies I used was professor interviews. The individuals I spoke with had extensive experience and wise opinions about what young kids need to learn about sustainability. They see university students from a range of diverse backgrounds, and thus know what types of early education produces environmentally-conscious young adults. Additionally, many of these professors have personal experience teaching environmentalism to children and grandchildren.

I would have enjoyed talking with more children's book authors, but could not successfully make contacts in the field in the limited time available.

# 3.0 Results and Discussion

In the following sections I present and synthesize my findings on environmental education and effective children's literature.

### 3.1 The Current State of Kids and Nature

Come people believe that children now spend too much time inside, with computers and televisions, than outside, exploring the natural environment. Spending time in nature benefits children. "Unlike television, nature does not steal time, it amplifies it...nature inspires creativity in a child by demanding visualization and the full use of senses" (Louv: 2005, 7). Many current naturalists and conservationists found their interest in the outdoors through hands-on experience. If the current generation misses this experience because they're spending time staring at screens, what will inspire the next generation of environmental leaders? (Louv: 2005, 150)

Outdoor experience provides learning that digital media can't simulate. "I feel most kids are hugely deprived [of nature]. Walking across a wet paddock may not be pleasant, but it's part of a formative experience—it's part of what's going on. On TV, the less aesthetic parts aren't shown. Bad smells, life and death—we're sheltered and

detached from it. There experiences give you a basis for evaluating life and making judgments about the world" (Chapman, personal communication 02/05/08).

However, not all people believe children interact with nature less today than they did in previous decades. "Young children have a spontaneous interest in the world around. You don't need to force kids to explore the environment—there's an innate curiosity and desire. Even in the city, there's opportunity to explore the world—the gecko in the alley, or lizard in the park" (Watson, pers. comm. 29/04/08).

### 3.2 Tenets and Goals of Environmental Education

Environmental issues are complex and often depressing. Therefore, how do you communicate sustainability principles in upbeat, child-comprehendible terms? Traditional environmental jargon doesn't translate to younger audiences: "you can't teach 'sustainability' to very young kids—that language doesn't work" (McManus, pers. comm. 01/05/08).

While children don't need to be unnecessarily scared, they also deserve the honest truth. "Even if you tried to shelter kids from environmental degradation, you would lose—they'd see it on the news. You have to address these issues, not hide them" (Crew, pers. comm. 24/04/08). Children also benefit from affirmative role models: they need to see positive examples of environmental change, instead of just situations of degradation (Chiras: 2005, 19).

Additionally, children deserve all sides of any given issue. "Education can just become something called brainwashing—the deliberate presentation of one side of a controversial issue. But we should help them see there's more than one side—we're limited in knowledge (Watson, pers. comm. 29/04/08). Giving children multiple perspectives enables them to make their own decisions, another vital part of treating children with respect. "We have the deep obligation to respect children as people. A person has the intellectual capacity to think through—we need to allow them to do this, otherwise we're restricting growth" (Watson, pers. comm. 29/04/08).

Environmental education also has the potential to steer children away from the influence of advertising, which attempt to hook them at an early age. "At least adults can reason that the products whose virtues are extolled in the barrage of TV advertisements might not perform as well as depicted...children don't have a chance," (Chiras: 2005, 116). By showing children that what's really important lies in spending time with friends and family, environmental education can help kids understand it's not geeky to lack an Ipod or the newest Jordan kicks. (Goldstein, pers. comm. 14/04/08). Kids can be influential in marketing, because they can shape their parents' purchasing decisions: "where kids have the most power is in the stuff they ask for. Rainforest conservation is out of their hands" (Goldstein, pers. comm. 15/04/08). Therefore, environmental education can empower children to make change through convincing them to ask for less, or at least to ask for eco-friendly alternatives.

Environmental education can also persuade children to get outside. Actual experience in nature can impact a child's emotional being, which fosters long-term regard: "when our hearts open, our minds naturally follow" (Chiras: 3005, 32).

Perhaps most importantly, successful environmental education incorporates fun. "Parents and teachers ought to be following the delight of a child—if a child lights up,

that's something the parents and teachers should pursue" (Watson, pers. comm. 15/04/08).

## 3.3 Overview of Environmental Storybooks

Environmental storybooks feature a variety of techniques and complexity levels. Some use art (and little or no words) to transport the reader to a particular ecosystem or connect the reader with a certain species. By displaying threatened and endangered ecosystems and species, these books can instill motivation for conservation. Other books are more word-based, and teach sustainability by featuring main characters who act with the environment in mind.

Many children's books feature animals, because stories about animals consistently engage and thrill young readers. These books could be seen as environmental because of the regard for and connection with nature that they foster. However, some storybooks have especially direct conservation and sustainability themes. I will presently discuss the most potent examples I have reviewed. (See Appendix B for a complete list of reviewed works).

Australian author Jeannie Baker illustrates her storybooks with collages made from vegetation, modeling clay, and paint. In the wordless, award-winning book Window the reader watches an un-gated and wooded backyard, with a lake and butterflies and birds, slowly turn into a littered, graffiti-ridden, concrete suburb. The story's ending, which shows the main character moving from the city to another wooded space, implies that concrete will eventually encroach upon the new home as well. Baker explains her goal in the author's note: "in this book I set out to tell the complicated issue of how we are changing the environment without knowing it...the end implores us to open a window in our minds" (Baker: 1991).

Another of Baker's books with a strong conservation message is Where the Forest Meets the Sea, which features a father and son's trip to the Daintree rain forest. After exploring the woods, looking at spiders, and climbing in ancient hollows, the boy is left to ponder whether the forest will still be there when he returns. The book teaches a lesson without being overbearing, and Baker's vivid and emotive collages transport the reader into the world of the rainforest.

In V for Vanishing Patricia Mullins also relies heavily on artwork to connect the reader with the natural environment. This book shows an endangered animal, made from torn tissue collage, for every letter of the alphabet. The back of the book provides scientific information on all the animals portrayed. In the author's foreword Mullins says "it is my hope that by highlighting the plight of these beautiful and fascinating creatures, this book will encourage a love for the animals and plants of our world, and the desire to care for all of them."

Some storybooks, such as The Magic School Bus at the Waterworks, emphasize humor and creativity. This book features a class' fieldtrip inside the water cycle, where kids ride inside the raindrops. Author Joanna Cole capitalizes on the imagination in order to get students interested in scientific processes. The story, which blurs the line between the real and the fantastic, ends with the students wondering if their field trip was only a figment of their imagination.

Gary Crews' extinction series utilizes more complex storylines. In I Did Nothing, which centers on the extinction of the gastric-brooding frog, the readers learn through the

example of the main character, who vows to take action (and not be scared to speak up against people taking advantage of nature).

The above storybooks are examples of the most effective techniques I found through surveying green literature: vivid illustrations, humor/imagination, and heroic main characters.

### 3.4 Overview of Green Guides for Kids

In addition to green storybooks, there are several green guides for kids that offer tips on boosting the sustainability of their homes, schools, and lifestyles. Many begin with an overview of the current state of the planet, with simple descriptions of terms like global warming, acid rain, and carbon footprints. Some also include fanciful illustrations and jokes, which probably help keep children interested in the more straightforward genre of non-fiction.

These guides range from the very straightforward to the more creative. From the former category, You Can Save the Planet by Rich Hough takes the reader through the schedule of a typical school day, giving suggestions for eco-actions throughout the day (such as doing homework in natural light, and saving water by taking military showers).

In a more creative example entitled You Can Save the Planet by Jacquie Wines, the reader becomes a detective who searches for "energy crimes" such as incandescent light bulbs. The book encourages the reader (who is an "eco-warrior") to keep a carbon journal, to write to her favorite shop about product lifecycles, to make and sign a family "pledge to the planet," and to write green rules to post around the house (such as bringing reusable bags to the grocery store and buying local and organic food). The book has samples of the above lists, letters and pledges that the reader can copy out. This book is especially effective because it empowers kids to take action and shows them exactly how to do so. Through illustrations of two comical looking children and the branding of readers as eco warriors and detectives, it also appeals to children's imaginations.

The Down-to-Earth-Guide to Global Warming is also extremely interactive. Its strength lies in describing science in kid-friendly analogies. For example, the authors describe global warming as earth wearing a heavy blanket it can't shove off in the middle of the night (David and Gordon: 2007, 2). Humans releasing CO2 is like asking Earth to eat a whole pizza when it only needs one slice (David and Gordon: 2007, 3). CO2 and temperature go together like PB and jelly, milk and cookies, and macaroni and cheese (David and Gordon: 2007, 17). The book also features games, such as a map where kids can connect all the dots of extinction around the globe. Chapter headings, such as "You Say You Want a Revolution," encourage kids to take action, as does the text: "knowing means a change in thinking that leads us to power our lives differently" (David and Gordon: 2007, 11).

### 3.5 Non-fiction vs. Fiction

Both fictional storybooks and non-fiction green guides have advantages.

Green guides are direct and information-dense. They offer thorough background on environmental issues, and specific and feasible ways to take action. Much like cookbooks, they supply the directions needed to get results. Through illustrations and fanciful language, it's also possible for green guides to be fun for children to read.

Storybooks have subtler, but sometimes more powerful, messages. Fiction can be easier for children to relate to: "fantasy forms a bridge between the objective factual outer world and what is developing within the child" (Day: 2007, 14). Additionally, storybooks reach children on a more than just intellectual level: "fiction tells the truth in a way non-fiction can't...it is the emotions that are true in fiction" (Woolley: 1991, 86). Storybooks provide experiences: children explore through stories; they "wander around inside them, thus stories give children vicarious experience through sensory and emotive images" (Saxby: 1989, 5). However, while storybooks may communicate environmental values, they often lack ways and actions for children to translate these values into their everyday lives.

Most importantly, both non-fiction and fiction can show children examples of role models who take positive action to help the environment. This confirms their own burgeoning environmental philosophies. "It helps to find support and comfort in likeminded souls, and exposure to people like this is good reinforcement" (Chiras: 2005, 186).

# 3.6 Effective Literary Techniques

A successful children's story appeals to readers of all ages. Storybooks "sneak up from underneath and evoke memories of childhood: that's why they work for both kids and adults" (Crew, pers. comm. 24/04/08).

The relationship between the reader and the main character contributes to the universal appeal of storybooks: the main character is a friend of the reader, which creates a sense of companionship (Krailing: 2004, 3). The main character is often someone the reader looks up to and admires. "It's all in the attitude of the hero. The hero has to be attractive, has to be a bit larger than life—a little more adventurous, a little more dangerous—but not so different that they couldn't put themselves in the same position" (Chapman, pers. comm. 02/05/08). Professor Chapman has developed his own set of stories about Rangi, a wooden artists' model that he dresses up and photographs in the places he visits. Rangi "gets involved in all sorts of things, but it's my values that are coming through. When he meets a spider, there's a sense of awe and wonder." (Chapman, pers. comm. 02/05/08)

Although many children's books carry some type of value or lesson, it's important to avoid writing down to readers. "Didacticism doesn't work too well at any age, but especially not for kids. If you have their respect you won't need it, and if you don't have their respect it won't work anyways. You don't need to carry around the façade of an authority figure" (Chapman, pers. comm. 02/05/08).

One method for avoiding this is to write for the child inside one's self. "If you try to write objectively, for some child or children 'out there', it is all too easy to fall into the trap of writing down to your readers" (Krailing: 2004, 4). Another tactic to avoid condescension is to put the story in a child's voice, rather than that of a teacher or librarian or other type of authority figure, so that it's accessible and easy for children to relate to (Crew, pers. comm. 24/04/08).

Humor is an essential element of storybooks: children love to laugh. Additionally, humor can make scary topics like global warming more accessible. "Humor is our safety valve, our way of coping with life and its stresses...it is part of our human survival kit" (Saxby: 1989, 285).

A successful storybook will take the imagination on a joyride and capitalize on the child's innate sense of curiosity. "Let the book grow naturally out of the wonder and appreciation they have picked up. I think you have to realize as an author that you can't do everything—you only have a certain input. You can't create people who are sensitive to the environment overnight—you have to let it come in the development of time" (Watson, pers. comm. 29/04/08).

Table 1: Advice from Interviewees

Name

Advice

Wendy Goldstein,

Environmental Education Professor,

MacQuarie University

- -need to take kids off the consumerist track: happiness is about friends and family, not possessions
- -children need to understand the full product cycle of their belongings
- -children need empowerment: the earth is what you make it.
- -an ideal book will give kids dreams and ambitions

Gary Crew,

Creative Writing Professor,

University of the Sunshine Coast

- -putting the story in a child's voice, rather than that of an authority figure, will help children relate
- -good books evoke memories of childhood and thus appeal to all ages
- -kids deserve full information about environmental issues; you can't shield them from it

Alan Watson,

Education Professor,

University of New South Wales

- -kids are very influenced by role models
- -children have a spontaneous innate interest in nature—this interest doesn't need to be provoked, just nurtured
- -a good story will follow a child's natural delight
- -the story must respect children as people and let them make their own decisions Philip McManus,

Geosciences Professor,

University of Sydney

- -children need to learn a sense of reliance: humans need nature, and are not separate from nature
- -if children learn to love the outdoors, they'll grow up to care for it and not destroy it
- -the impact of a book depends on when it's read, how it's read, and who it's read with David Chapman,

Geosciences Professor,

University of Sydney

-kids don't learn by telling them to do something: they learn by

seeing people they value doing it

- -the hero of a story has to be larger than life
- -kids don't mind being frightened and crave adventure
- -didacticism doesn't work for any age group

### 3.7 What Kids Want

At the brainstorming session held May 3rd at Kinma School, five kids aged eight to 10 commented on what environmentalism means to children. One boy expressed a "need for truth. You can't just say, let's save the environment, which you've heard a hundred times. People have to see that you really mean it." According to one participant, a way to show environmentalism matters is to have "kids get the message out there. Kids have to get it, but not be scared. Kids need to write about it to other kids."

One child commented she would like a book with "an interesting main figure to make it funny and fun, like a global warming hero...not just 'the world is about to die' again." Their favorite qualities in books include funny sayings, games, having to find hidden clues on each page, jokes about toilets and underpants, and challenges to actually get out there and do something.

In the second brainstorming session on May 6th at Whale Beach, I discussed the broad topic of environmentalism with six children between ages five and twelve. They had several creative green ideas, like powering cars off of cream soda (with a giant straw coming out of the tank) and powering their computers off of a rat running on a wheel. They all like to spend time outside climbing trees, and seemed to have good knowledge of local species.

### 4.0 Final Product

The final product is a storybook, entitled There's a Skink in the Shower!. The storobook follows two twins and a skink as they make their room greener over the course of one week. See Appendix A for the full illustrated text.

# 5.0 Reflection and Critique of Final Product

## 5.1 Aim of Storybook

In this storybook I attempted to merge the genres of fiction stories and non-fiction green guides. By integrating both lovable main characters and practical ideas for ecoactions, I hoped to both entertain children and inspire children to give their own rooms eco-makeovers. I chose boy and girl main characters so that all children could relate to them, and included a skink companion because of children's affinity for animals.

### 5.2 Evaluation

A main challenge of this project was to pick which eco-actions the main characters would take part in. Because there are so many green things children can do (see Appendix C for list), it was tempting to pack too much information into the book. Therefore, I tried to pick only the most important suggestions. I attempted to balance the practical side of the book with elements that were more fun and imaginative, so that the storybook would remain entertaining.

Getting feedback on the first draft (both from children and adults) was very worthwhile. Based on this feedback, I changed the names of the main characters and skink, made the beginning of the story more straightforward, and replaced several American words (candy, laundry, faucet) with their Australian equivalents. This feedback also made me realize how much children value adventure stories: one person suggested having the main characters be trapped in their room, with evil plastic bags that come alive and the like, until they can make it greener. In future stories, I will try to paint scenarios that are less like real life and more like fantasy life.

I regret that I could not make the story more interactive. I decided to leave the story in black and white, so that it can be used as a coloring book: if children spend time filling in pages, they might better absorb the material. However, I'm not sure that the present form will inspire children to actually re-evaluate environmental pit-falls in their own rooms. Ways to make the book more interactive could include fill in the blanks for certain words, asking the reader questions, using flaps, and embedding clues and symbols within in the text that the reader has to decipher.

### 6.0 Conclusion

## 6.1 Summary

As environmental problems worsen, there is a strong need for early sustainability education. Storybooks, which help children understand the outside world, have the potential to instill environmental values that will persevere until adulthood. Good storybooks utilize a valiant and larger-than-life main character, humor, and a sense of adventure and fun. When conveying environmental issues, it's important to present all sides of the issues, to give children respect in making their own decisions, and to empower children to make change.

Children can learn environmental values through both green storybooks and green living guides. While green living guides are more information dense and offer suggestions to take action, green storybooks may resonate more with children's emotional and sensory sides. In both forms, it's important to keep an optimistic outlook and to present role models who are acting positively for the environment.

## 6.2 Suggestions for Further Research

I would suggest researching ways to make storybooks more interactive, so that the storybooks hold readers accountable for making changes in their own lives. One way to do this is through adapting storybooks for the web, where children can comment and interact on discussion boards and blogs. I would also look into ways for children to develop and publish their own stories with environmental themes. This way, children could share their environmental success stories with one another, and be more motivated by what other children are doing.

### References

Baker, Jeannie. Belonging. London: Walker Books, 2004.

Baker, Jeannie. The Hidden Forest. London: Walker Books, 2000.

Baker, Jeannie. Where the Forest Meets the Sea. Sydney: Julia MacRae Books, 1987.

Baker, Jeannie. Window. London: Julia MacRae Books, 1991.

Base, Graeme. Uno's Garden. Camberwell, Vic: Penguin Viking, 2006.

Bayer, Jose. Rescue Mission, Planet Earth: a Children's Edition of Agenda 21. London: Kingfisher Books, 1994.

Butzow, Carol and John. Science through Children's Literature: an Integrated Approach. Colorado: Teacher Ideas Press, 1989.

Chapman, David. 2008. Personal Interview with David Chapman, Geosciences Professor at the University of Sydney, conducted on 02/05/08.

Chiras, Dan. Ecokids: Raising Children Who Care For the Earth. British Columbia: New Society, 2005.

Cole, Joanna. The Magic School Bus at the Waterworks. New York: Scholastic Inc, 1986.

Collins, Rives. The Power of Story: Teaching through Storytelling. Arizona: Gorsuch Scarisbrick, 1997.

Crew, Gary. 2008. Personal Interview with Gary Crew, Creative Writing Professor at The University of the Sunshine Coast, conducted on 24/04/08.

Crew, Gary and Mark Wilson. I Did Nothing: the Extinction of the Gastric-Brooding Frog. South Melbourne, Vic: Lothian, 2004.

Crew, Gary and Mark Wilson. I Said Nothing: the Extinction of the Paradise Parrot. South Melbourne, Vic: Lothian, 2003.

Crew, Gary and Mark Wilson. I Did Nothing: the Extinction of the Thylacine. South Melbourne, Vic: Lothian, 2003.

David, Laurie and Cambria Gordon. The Down-to-Earth Guide to Global Warming. New York: Orchard Books, 2007.

Day, Christopher. Environment and Children: passive lessons from the everyday environment. London: Architectural, 2007.

Elkington, John and Julia Hailes. Go Green! What You Can Do to Help Save the Planet. Victoria: Penguin Books, 1992.

Fleischman, Paul. Weslandia. London: Walker Books, 1999.

Gershon, David. Journey for the Planet: A Kid's Five Week Adventure to Create an Earth-Friendly Life. New York: Empowerment Institute, 2007.

Goldstein, Wendy. 2008. Personal Interview with Wendy Goldstein, Environmental Education Professor at Macquarie University, conducted on 15/04/08.

Ha, Tanya. Greeniology: How to Live Well, Be Green, and Make a Difference. Victoria: Melbourne University Press, 2007.

Hough, Rich. You Can Save the Planet: a day in the life of your carbon footprint. United Kingdom: A & C Black Publishers, 1997.

Krailing, Tessa. How to Write for Children. Great Britain: Allison & Busby Limited, 2004.

Lester, Allison. Are We There Yet? Victoria: Penguin Viking, 2004.

Louv, Richard. Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder. South Carolina: Algonquin Books of Chapel Hill, 2005.

McManus, Philip. 2008. Personal Interview with Phil McManus, Professor of Geosciences at the University of Sydney, conducted on 01/05/08.

Mullins, Patricia. V for Vanishing: an alphabet of endangered animals. New South Wales: Scholastic Press, 2004.

Mullins, Patricia. Dinosaur Encore. New South Wales: Scholastic Australia, 2004.

O'Callaghan, Patrick. Green Ideas: Things Kids Can Do to Save the Earth. Port Melbourne: Mammoth Australia, 1991.

Pollack, Michael. Hearts & Minds: Creative Australians and the Environment. New South Wales: Hale & Iremonger Pty Limited, 2000.

Rives, Collins. The Power of Story: Teaching Through Storytelling. Arizona: Gorsuch Scarisbrick, 1997.

Saxby, Maurice and Gordon Winch. Give Them Wings: the experience of children's literature. South Melbourne: Macmillan, 1987.

Saxby, Maurice. "Researching Australia Children's Literature." The Australia Library Journal, 2004. http://www.alia.org.au/publishing/alj/53.1/full.text/saxby.html.

Seuss, Dr. The Lorax. London: Collins, 1972.

Suzuki, David. You Are The Earth. New South Wales: Allen & Unwin, 1999.

Toft, Kim Michelle. The World That We Want. St Lucia, Qld: University of Queensland Press, 2004.

Watson, Alan. 2008. Personal Interview with Alan Watson, Professor of Education at University of New South Wales, conducted on 29/04/08.

Wines, Jacquie. You Can Save the Planet. Sydney: Lothian Children's Books, 2007.

Woolley, Catherine. Writing for Children. New York: Plume Printing, 1991.