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Let's Talk About the Environment: A Content Analysis of the EcoKids Discussion Forum

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Abstract:

The discussion forum on a popular environmental website for children, EcoKids.ca, underwent a content analysis. The researcher looked at how children utilized the forum and searched for common themes. She found that very little interpersonal interaction occurred on the site, but that the users appeared engaged with both the site and the topic of environmentalism. The children's understandings of the environmental problems faced by the world were generally simplistic and did not necessarily represent the most pressing issues identified by environmentalists.

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Let's Talk About the Environment: A Content Analysis of the EcoKids Discussion Forum

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Introduction

Children are online more than ever before, spending between 45 minutes and two hours on the computer each day (Rideout, Foehr, & Roberts, 2010). While favoured sites do not tend to be educational in nature (Blackwell, Lauricella, Conway, & Wartella, 2014), websites are a popular way for educational organizations to reach out to children and youth. EcoKids is an environmental education program that was developed twenty years ago by Earth Day Canada. The program is currently run through its website, EcoKids.ca. Children's activities on this site, the discussion board in particular, provide a glimpse into how children use online social tools, as well as prevalent conceptions of the environmental challenges the world currently faces.

EcoKids

EcoKids is a website dedicated to educating children about environmental issues. Created as a non-profit organization ('About Us', n.d.), the site contains homework resources, games, and contests aimed to engage children and teach them about the environment. The site has won a number of awards - albeit very few in the last ten years ('About Us: Awards', n.d.) - and comes highly recommended by Common

Sense Media. Giving it a five star review, Common Sense Media deems it to be a well-organized, colourful, and informative site best suited to children aged seven to seventeen ('EcoKids.ca - Website Review', n.d.).

A popular section of the EcoKids website is a question and answer forum called "Have Your Say". Questions are posted by users and the site administration, and others are invited to submit an answer. The questions cover an array of topics but usually involve environmental themes. Answers submitted by users must be approved by the administration before being posted. It is unclear how stringent the posting criteria are, but the site states that it checks for personal information and inappropriate language before allowing comments to be posted to the World Wide Web ('Have Your Say: About/Privacy', n.d.). Users may (or may not) include their first name, age, and city when they submit their answers. There is no registration so all information is self-reported and unverifiable. Posters are for all intents and purposes anonymous and may post as often as they like.

Learning online

Discussion Boards

Much of the world has moved online and education is no exception. It is not unusual for classwork at the elementary, secondary, and post-secondary levels to involve going online. Most of the research in this area has focused on post-secondary education, but many of the findings can be tentatively applied to younger students. Discussion board use has been associated with higher academic achievement in some courses. Alghamdi (2013) found that students required to use the discussion board feature on Blackboard (an online class management program) did better than students who did not and Riley (2006) strongly believes that online discussion boards help middle school students develop more complex understandings of their course materials. Despite this, there is also evidence that simplistic online

educational tools are not as effective as they could be. Some argue that traditional discussion boards are boring and that there must be the opportunity for creativity if students are to be truly engaged (Adelman & Nogueras, 2013). This is supported by Liu, Cheng, and Lin (2013) who found that elaborate forums had better educational outcomes than their more simplistic counterparts.

Discussion boards present a number of educational opportunities for students. Depending on their complexity, they may enable students to participate in debates and create wikis, which help students engage with the materials on a deeper level (Adelman & Nogueras, 2013). They may also present the opportunity for socially reserved individuals or those with limited spoken language skills to interact with others in the class (Dengler, 2008). In other words, discussion boards can provide a voice to those who do not often get a chance to be heard. This may be especially important to children. Perhaps most importantly, discussion boards can help create a sense of community. Community is not only important to a person's personal well-being, it is also a way to increase a student's commitment to a subject matter. Relationships with fellow students can be an important motivator for a person to participate on a discussion board in an educational setting (Cheung, Hew, & Ling Ng, 2008; Hrastinski, 2009).

Online discussion boards currently have a lofty reputation in the educational community, however it is uncertain whether EcoKids' forum lives up to this potential. The interface of the forum is extremely simplistic: Posts do not contain date stamps, there is no reply or "like" feature, and users do not have personal profiles. In addition, supporting or guiding content is not provided in the forum. The EcoKids site contains a wealth of information about environmental topics. There are fact sheets and activities covering a multitude of topics, many of which are implicated in the questions posted on the forum. Despite this, there is no linkage between the

questions being posed and the rest of the site. In addition, users' submissions are vetted before posting. This is understandable from a safety perspective; however, it means a delay between submitting a post and seeing it displayed on the site, something that has been identified as an important consideration when engaging users (Liu et al., 2013). This also decreases the sense of free discourse that one ideally has when interacting with an online forum. Despite these drawbacks, it should be noted that a discussion board is more than the sum of its parts. Oftentimes its effectiveness can be seen on more intangible levels, such as the user going away and thinking about what they have read (Hrastinski, 2009). A user posting a high number of messages to an educational discussion board does not always correlate with a better grade (Alghamdi, 2013).

Question and answer sites

As discussed earlier, the EcoKids' forum takes the form of a question and answer site. A question is posted and other users are invited to contribute their thoughts and/or knowledge. The types of questions asked vary from fact-based inquiries ("How does tourism affect different ecosystems?") to discussion prompts ("What do you think is the biggest environmental problem?") to personal questions ("What are your New Year's (Green) resolutions?"). As with most question and answer sites, the answers elicited have varying levels of accuracy. Reviews of question and answer sites targeted to adults, such as Yahoo! Answers, have found accuracy levels that are lucky to break the 56% mark (Fichman, 2011). Adult questioners do not tend to verify the answers they are given; rather, they judge answer quality by markers such as the usage of correct spelling and the perceived expertise of the respondent (Kim, 2010).

While the purpose of the EcoKids' discussion board is more likely to engage children with environmental issues and to elicit reflection on the topic, the format still raises concerns. The lack of user profiles and the ubiquity of poor written language skills

means that it is difficult to judge the quality of an answer based on the answer's content alone. In addition, questions are not linked with related topics from the rest of the site. There is little guidance or help provided to users when looking for information in the context of the forum. While this hands-off approach likely contributes to young users' sense of ownership of the forum, it also makes it quite easy to become misinformed or to have erroneous beliefs reinforced. The questions themselves present a challenge, as well. Many questions request opinions on factual topics and do not support the generation of accurate answers. For example not only is the question "Do you think birds are key to the food chain?" phrased as if the ecosystem model is a matter of opinion, it also suggests that some organisms are more valuable to the food web than others.

Procedure

Selecting questions for analysis

While the questions posted to the EcoKids' site are almost entirely themed around the environment (with some notable exceptions, such as "What is your favourite book?"), the type of information being requested varies widely. Many questions involve asking children what they do that is environmentally friendly, some ask more ethically-minded questions, while others debate the importance of taking care of the environment. The goal of this study was to find out how children use the "Have Your Say" section of the EcoKids website and so it was important to include a variety of questions to accurately capture how children use the page. On the other hand, the researcher was also extremely interested to see how children perceive the challenges faced by the environment, as well as how they think humanity is to address these challenges. For this reason, some questions were not included in the analysis. Questions posed to the site's users that did not have a strong environmental focus or did not probe children's views on the environment or being

environmentally friendly were removed from the sample.

The number of responses to each question varied widely. One question had no responses, while another had 254. It was also unclear whether answers were posted in ascending or descending chronological order (or if they were posted in any order at all). Due to time constraints, it was decided that the first and last five responses would be analyzed for each question. While not ideal, it ensured that responses to popular questions were represented without placing an undue burden on the coder. If a question had fewer than ten responses then all of its answers were analyzed.

To determine the number of questions in the Have Your Say archives, the researcher copied and pasted the list of archived questions into Excel. After deleting duplicate topics (presumably posted due to site administrator error) it was determined that there were 183 questions. The questions were assigned numbers sequentially, with "1" being assigned to the first question in the archives list. Using <http://www.randomizer.org/form.htm>, a list of 30 question numbers was randomly generated. Five questions that did not fit the described profile and one that did not contain any responses were removed from the list, leaving 24 questions to analyze. In total, 227 responses were included in the data set. The list of questions included in the sample can be found in Appendix 1 and the list of omitted questions in Appendix 2.

Inductive content analysis

Developing the coding scheme

The coding scheme for this content analysis was developed inductively. The researcher read through a number of posts, observing trends and themes. She then

created a coding scheme using her observations. The development of the coding scheme was an iterative process with the scheme being amended a number of times: Items were further defined, added, or removed, as the analysis continued. Once the final model was in place, all items were re-scored.

Results

Demographics

Initially, the researcher planned to gather data pertaining to users' self-reported geographic location. It soon became clear that this would not be feasible as little information was provided past the name of the user's municipality. There are many cities and towns with identical names and, while the researcher could make a best guess balanced on probabilities as to which city the user was referring to, the amount of work required to look up each city name was not justified. Despite the lack of hard data it is apparent that EcoKids users come from not just Canada but across the globe, ranging from New Zealand to Kuwait. According to self-reported data, the youngest user was purportedly 1 year of age and the oldest was 92. Both the median and mean ages were 11 years old.

Data Tables

The following tables show the number of posts coded to various categories, as well as their relative frequencies in the forum.

	# of posts	% of all posts	% of category
ON-TOPIC	177	78.0%	
OFF-TOPIC	50	22.0%	
<i>Enthusiasm for environment</i>	1	0.4%	2.0%

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<i>Enthusiasm for site</i>	14	6.2%	28.0%
<i>Pleas/directives to save earth and/or animals</i>	15	6.6%	30.0%
<i>Other</i>	20	8.8%	40.0%

	# of posts	% of all posts	% of category
EMOTIONAL CONTENT	71	31.3%	
Negative affect (anger, frustration, sadness, worry, disdain)	24	10.6%	33.8%
Positive affect (excitement, pride, hope, idealism)	12	5.3%	16.9%
Emphatic opinion/Passionate about environment	35	15.4%	49.3%

	# of posts	% of all posts	% of category
WHAT CAN WE DO?			
3Rs (any or all mentioned)	36	15.9%	
<i>Reduce</i>	5	2.2%	13.9%
<i>Reuse</i>	13	5.7%	36.1%
<i>Recycle</i>	31	13.7%	86.1%
Composting	1	0.4%	
Picking up garbage/don't litter	30	13.2%	
Commuting responsibly	17	7.5%	
Energy efficiency/alternative energy	11	4.8%	
Word-of-mouth/campaigning/education	12	5.3%	

Stop polluting (no qualifiers present as to how)	7	3.1%	
Importance of working together	7	3.1%	

	# of posts	% of all posts
MISCELLANEOUS ATTITUDES/OBSERVATIONS		
Future generations/world is ours to keep/we depend on it	5	2.2%
Companies/corporations = bad/at fault	2	0.9%
Government (should do something, e.g. pass a law)	16	7.0%

	# of posts	% of all posts
PREDOMINANT CONCERNS		
Destruction of world	8	3.5%
Resources being depleted	2	0.9%
Global warming/climate change	9	4.0%
Trees being cut down	13	5.7%
Hunting/poaching	7	3.1%

	# of posts	% of all posts

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TYPES OF POSTS		
Response to other poster	1	0.4%
Question/request for feedback or opinion	7	3.1%
Humour/silly	5	2.2%

	# of posts	% of all posts
EXPRESSIONS OF LOVE OR APPRECIATION		
Love for planet/environment/nature	8	3.5%
Love or concern for animals	30	13.2%

	# of posts	% of all posts
EMPOWERMENT (personal ability to make a difference)		
Empowerment	37	16.3%
Disempowerment	9	4.0%

Discussion

Usage of the forum

There was very little direct interaction observed between users. The vast majority of posts were stand-alone statements expressing the user's opinion about the matter at hand. Out of the 227 posts included in the study, only one was a response to another user. Another seven were requests for information, clarification, or discussion. This means that over 96% of these submissions displayed no interest in social interaction beyond answering that month's question. This belies the hope that the forum functions to create a sense of community among its users.

 **A message from Jenna**

I totally agree with Paige! If we boycott, it'll make the world a better place. But boycott the right things. If we all try harder, life would be easier.

Jenna , 10, Calgary, Canada

 **A message from Celie**

Are freshwater biomes being cut down for the need of wealthy people? (trees for houses)

Celie , 17, kent

There was some subtle evidence, however, that posts were being read by other users. Many questions have common themes in their answers that are not easily attributable to the question itself. For example, one question may have numerous references to logging while a similar question from several months (or years) earlier does not. This suggests that children read others' answers before writing their own responses.

It was evident that the forum's users took it seriously. Very few attempts at humour or silliness were observed in the answers. In fact only two posts, nearly identical in wording and likely by the same user, were indisputably intended to be silly. The other three were judged to be at least partially tongue-in-cheek, although the limited number of indicators (wording, user icon) available made it at times difficult to determine a poster's true intentions. Because there are no specific guidelines available as to what is and is not allowed to be posted, it is possible that not all silly submissions are approved. As all parents and caregivers know, children can have less than tasteful senses of humour. It is entirely possible that a joke hilarious to a young user ("Blow up the Amazon!") may be deemed inappropriate by a more mature site administrator. The high concentration of earnest posts on the site likely influences users when they are considering whether to submit a silly answer or not. In her discussion of genre analysis, Enriquez points out that the forms in which online transcripts appear are largely influenced by other users in the arena (Enriquez, 2009). We take our cue from other users as to what is appropriate, as well as to determine how to best get our point across.

 A message from amber

i want a sunflower pleaseeeeeeeeeeee xxx

Question:

Do you think that our contributions towards the environment make a big difference?

 A message from Jak

No mosquitos for sure.I hate those little pests

Question:

If there was one thing about the world that you could change, what would it be?

Engagement and enthusiasm

Children who post to the EcoKids forum have strong opinions and overall seem engaged with both the site and the topic of environmentalism. Over three quarters of the posts were on-topic in that they responded, at least partially, to the question



A message from Amanda

I think it is wrong to kill animals for their fur because the whole food chain depends on every animal and if you kill to many it can disturb the chain.

Amanda , 12, Maineville, United States

Question:

How can we get more kids and parents to care about the environment?


being asked. Of the remaining answers, almost a third were praising the EcoKids website and another third were expressing the importance of saving the environment. While not fitting into the preceding categories, the remaining 40% of off-topic comments were overwhelmingly themed around the environment and users' opinions about what should be done.

Emotional content, largely determined via the presence of exclamation marks and feeling words, was also evident in nearly a third of the posts. In turn, a third of these expressed negative affect such as frustration, anger, or sadness. It is clear that many of these children are upset about harm being done to the environment. Positive affect, such as pride, excitement, or hope was a little harder to tease out but largely took the form of children talking about something good they had done for the environment or their belief that the planet can be saved. About half of the emotional content did not fit comfortably into the positive or negative affect categories and were best described as emphatic opinion. These posts were also largely determined by the presence of exclamation marks and/or all letters being capitalized. Many of these posts were instructing others in how to best save the environment or were

general demands to be environmentally friendly.

 **A message from Dawn**


I've noticed that nobody cares! They all say that the only reason the Earth is changing is because the world is going to end. I believe it is because about 95% of the Earth's population does not do the right thing

 **Dawn** , 12, Knoxville

 **A message from amy**

I had a protest on saving the earth and people listened to my speeches and stopped poluting!

amy , 3, bombay

 **A message from Lili**

We all have to make the world a better place for all of us!

Lili , 10, Teaneck

Attitudes about the environment

The status of the situation

Users were virtually universal in their care for the environment. Three and a half percent of the posts included comments that outright expressed their love for the planet and others worried about the world's ultimate fate. A few (2.2%) voiced concern about future generations or the fact that we depend on the Earth for survival, quite possibly a representation of their own fear surrounding the viability of the planet to support them in the future. It was also not uncommon to read posts about the world being destroyed or made uninhabitable. Fortunately, many seemed to feel empowered to make a difference; indicating that they believed their choices and behaviours have an impact. Sixteen percent of posts contained assertions about kids' ability to make a difference or a more undefinable sense of purpose and effectiveness, while only 4% had messages of helplessness or despair.

 **A message from Tinuviel**

i hate the destruktung of rainforests you can help you know 1. do not buy rain forest products. 2. start a rain forest club. 3. make a web site telling pepole to do things above.

Tinuviel , 8, stokholm, Sweden

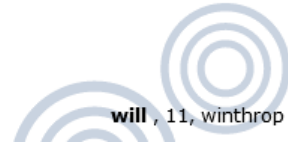
Question:

The cutting down of the amazon rainforest, how can we help and how does it affect us?



A message from will

no



Question:

Do you think that our contributions towards the environment make a big difference?

Environmental issues were largely seen as simplistic issues of black and white. Many posts were no more than one sentence long, leaving little room for elaboration or qualification. It is clear to many of these users that the environment is in need of saving and something must be done about it, the sooner the better. While these steadfast and assertive posts leave no room for doubt as to where these young citizens' priorities lie, they do not reveal an awareness of or consideration for the factors that have led to the current environmental crises.



A message from Rufus

ARE WE GOING TO SAVE THE EARTH FOR THE FORTH COMING GENERATIONS OR ARE WE GOING TO DESTROY THE EARTH WITH NUCLEAR,BURNING OF FOSSIL . I THINK IT IS TIME TO THINK !!!!!!!!

Rufus , 12, salmaniya

This lack of nuanced argument is largely attributable to the age of the users, as well as to the format of the site. Most of the questions do not demand that respondents weigh pros and cons or ask the children to reflect on how and why the environment is in its current state. In addition, interaction between posters is not common nor encouraged and the audience is largely composed of individuals with similar outlooks. This means that there is no debate and thus little impetus for users to reflect on their beliefs any deeper than they already have. Some posts buck the

black and white trend, however, with users demonstrating a more nuanced understanding of how the world works. In these posts, promotions for balance and compromise usually take the place of sweeping statements.



A message from Jakot

They should protect the animals, but at the same time keep the tourism active because there is such a large industry that many people must depend on the tourism to make a living.

Jakot , 10, Guelph

Question:

*MANY OF THE MOST UNIQUE AND BEAUTIFUL PLACES IN THE WORLD,
LIKE THE AFRICAN SAVANNAH, HAVE A LARGE TOURISM INDUSTRY. HOW
DO YOU THINK THESE ECOSYSTEMS ARE IMPACTED BY TOURISM?*



A message from panda

i don't really no, i mean i have to think both ways, yes, because the garbage is wasting up our invierment, but also no, because what do the people that don't have enough money do with thier trash, i mean we still have to eat and now the food we eat is covered in wrappers for our garbage, so we should not use so many rappers for our garbage and start using recycleable rappers. Then there wouldn't be this problem!!!!

panda , 12, seattle

Question:

*DO YOU THINK PEOPLE SHOULD PAY A FINE FOR PUTTING OUT TOO
MUCH GARBAGE?*

Animals and the environment

Users largely seemed to equate the environment with animals. The focus on animals' well-being and the survival of various species was noticeable, with 13% of posts expressing love or concern for fauna. Little attention seemed to be paid to flora, possibly because it is markedly more difficult to sympathize with plants. Many posts concerning animals contained empathetic statements such as "I would not like it if..." or "how would you feel..." indicating that children are emotionally affected by animals' plight (real or perceived). Animals were seen to be negatively affected by humans in a number of ways, but especially by hunting, garbage and pollution, and habitat loss.

 **A message from sha'borah**

no, it's not okay to shoot birds. they have a right to live too. would you want to be shot at while you're trying to make a living!

sha'borah , 15, atlanta, United States

Question:

Do you think birds are key to the food chain? Is it O.K. to shoot birds of prey?

Hunting and poaching were at times used interchangeably and there did not always seem to be an understanding of how different species are affected by hunting. Killing a deer and killing a tiger have very different environmental ramifications. There was virtually no concern expressed for farm animals, even though their lives and deaths have a far greater environmental impact and involve a great deal more suffering than game animals. Garbage and pollution were seen to have a direct impact on wild animals' health. Litter and idling vehicles were both mentioned as being potentially harmful or even deadly; although sometimes the researcher was hard pressed to determine how the two issues (e.g., animals and car exhaust) were directly related. Habitat loss, especially cutting down trees, was seen as another huge threat to wildlife. Many children recommended that we just leave the animals (and their habitats) alone.

 **A message from Juliana**

I think that the main cause of animal endangerment and extinction is poachers and hunters. They mainly use the animals meat for food and their fur and/or hide for clothing articles like : leather boots, coats, pants and purses/handbags.

Juliana , 11, Windsor, CT

Question:

How do you think endangered animals are becoming extinct or threatened? (Poaching, Predators, Lack of food, etc.)

How to make a difference

Garbage and recycling

Users had no shortage of opinions about how to help the environment. Refuse was seen as a huge environmental offender. This could also be seen in the questions posed, as three of the twenty four questions involved stuff (“What kind of stuff could



A message from nyya

people dont recycle enough and people throw away good things that could be reused

nyya , 12, chicago

Question:

*What can you do to save the whale
population?*

you reuse? What don't you reuse?”). Litter was a common theme found in these posts. Users often discouraged littering and identified picking up garbage as a way to help the environment. Nearly 16% of all posts mentioned at least one of the 3Rs, with the vast majority of them mentioning how recycling is an important way to help the environment. This may have been partially skewed by the presence of the question “Should we recycle even more?” in the sample set; however, with this question removed 11.5% of the responses still mentioned recycling. Even after removing the other two questions that directly mention refuse (“Do you think people should pay a fine for putting out too much garbage?” and “What kind of stuff could you reuse? What don't you reuse?”), ten percent of the responses discussed recycling. In reality, recycling is more of a last ditch effort at mitigating and managing our waste, with reducing what we buy and then reusing what we have taking precedence. Despite this, only five posts mentioned reducing at all and even then it was generally part of a recitation of the 3Rs rather than a discussion of what it actually means. Composting and food waste received even less attention than consumption reduction.

Energy use and pollution

Overall, energy use had a notable but not overwhelming presence in the forum. A few users lamented the lack of electric cars, while others professed affection for alternative energy sources such as solar power. An unexpectedly low number of users discussed ways to save energy such as turning off lights. Limiting vehicle use was viewed as an important way to mitigate environmental impact and limit the use of fossil fuels. Interestingly, after omitting the question “To create less pollution should you ride your bike or the bus?” from the analysis the number of users who mentioned responsible commuting plummeted to just 3%. The children recognized that it is important to ride your bike or, if that is not feasible, to take the bus or carpool, however it seemed to require prompting for them to discuss transportation with any enthusiasm.

The number of vague references to “pollution” was surprisingly (to the researcher, at least) low at 3%. Taken in context, the word seemed to refer to a number of different types of pollutants (e.g., air pollution or garbage). The term seemed to be especially prevalent when discussing the ocean, giving the impression that the users knew there was polluting going on but that they were not quite sure what the ocean was being polluted with. This observation would need to be further investigated, however, before being asserted with any confidence.

Spreading the word

The importance of spreading the word and working together was observed by a number of users. Many children talked about educating their parents and peers so that others would understand the importance of being environmentally friendly. Recommendations took many forms, from having conversations with your family about recycling to loudly objecting when you see someone committing an offence such as littering or polluting. Some users advised others to write letters to their governments, encouraging them to pass environmentally friendly legislation. In fact,

7% of posts indicated the user believed that the government should play a role in environmental protection. Some of these posts outright stated that certain laws should be passed, while others were more circumspect saying that people should not be allowed to do certain things. While most posts were individualistic in nature (e.g., "I do this" or "You should do that"), a minority of users saw teamwork as an important part of creating a better world. Some assured readers that together kids could make a difference, while others discussed creating clubs at school.

 **A message from Kangaroo Lover**

We cannot litter and if you see someone throwing a candy rapper down a public vent, tell them NEVER to that again.

Kangaroo Lover, 11, New York

Question:

*HOW CAN WE IMPROVE THE ENVIRONMENT THAT
WE LIVE IN?*

Environmental threats

The majority of the EcoKids forum users cared about the environment and expressed concern that it was in danger. From pleas to "Save Mother Earth", to suggestions about how to be more environmentally friendly, to concern about animal welfare it was evident that the children who use the site feel that the health of the planet is at risk. While specific concerns about the environment were not often discussed, some themes did emerge.

As was previously discussed, garbage (litter in particular) was singled out as being a large threat to the environment. Users expressed concern about garbage in the ocean hurting sea life, as well as refuse on land posing a risk to terrestrial animals. Nearly 6% of users indicated that cutting down trees was cause for alarm. The reason given for why cutting down trees was bad was either that it had a negative impact on global warming and/or oxygen levels, or that it destroyed animal

habitats. Some of the discussion about deforestation was specifically aimed at the Amazon rainforest, however much of it was not specific to a particular locale or biome. Global warming or climate change was the next most common environmental fear or threat mentioned by posters. This was more challenging to code as it appeared that many of the children were a little confused as to what exactly global warming meant. For example references to running low on oxygen were not uncommon. The researcher chose not to code these as incidents of global warming since it was unclear whether that was indeed what the child was discussing.

**A message from bobby**

come on people lets get working on helping to save the world. stop climate change help stop carbon emmisions.

bobby , 7, leicester

QUESTION:

ARE YOU GOING TO HAVE A GREEN BACK TO SCHOOL? HOW?

Conclusion

Children using the EcoKids discussion board displayed limited interaction with other users. This may be more a result of how the site is constructed rather than a reflection of how middle school aged children use social tools online. Overall, posters displayed a marked concern for the environment and a high level of engagement with both the site and its content. The challenges facing the environment were viewed somewhat simplistically and often did not reflect reality. While not surprising considering the average age of the users, complicated topics were reduced to unsophisticated depictions of right and wrong. The children were hyper-focused on activities that are easy to do, such as recycling and turning off

light switches, while more difficult behaviour changes were virtually never discussed. The use of animals as a sort of proxy for environmental concerns was also noted. Future research may want to explore children's understanding of more subtle and complex environmental issues such as global warming and consumerism.

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Appendix 1 – Questions analyzed

Questions analyzed
The cutting down of the amazon rainforest, how can we help and how does it affect us?
Do you think birds are key to the food chain? Is it O.K. to shoot birds of prey?
Earth Day is fast approaching...tell us what YOU are going to do to help our earth!
How can we get more kids and parents to care about the environment?
How do you get to school?
Spring is finally here! It's time to get outdoors now that the weather is getting warmer! What outdoor activities do you like to do in the spring time? How are you going to make sure that your activities are not harmful to the environment?
Do you think people should pay a fine for putting out too much garbage?
Should cars be allowed to idle (to keep the car engine running while stopped) while waiting in a fast food drive thru? What about while waiting to pick someone up? Can you think of a way to encourage people to stop idling their cars?
Many of the most unique and beautiful places in the world, like the African Savannah, have a large tourism industry. How do you think these ecosystems are impacted by tourism?
Do you think that our contributions towards the environment make a big difference?
What can be the effect of global warming?
What happens to ALL the water that goes to waste?

**Let's Talk About the Environment: A Content Analysis of the
EcoKids Discussion Forum**

Do you think kids can change the world and help the planet?
If there was one thing about the world that you could change, what would it be?
Are you living "green"? Share an environmental tip with us!
Are you going to have a green back to school? How?
How do you think endangered animals are becoming extinct or threatened? (Poaching, Predators, Lack of food, etc.)
Should we recycle even more?
How can we help save Kangaroos?
How can we improve the environment that we live in?
If you could change one thing that the human race has done to damage the planet, what would it be?
To create less pollution should you ride your bike or the bus?
What can you do to save the whale population?
What kind of stuff could you reuse? What don't you reuse?

Appendix 2 – Questions omitted from analysis

Questions omitted from analysis
Summertime is coming. Tell us about your favourite place to explore nature in the summertime. Is it a wetland, a creek, a forest, the ocean, a field, a park, your backyard? What do you see, smell and hear there?
What outdoor activities can you do in your neighbourhood that might be different from someone living in a different part of the world?
What is your favourite animal and why?
Celebrate World Teachers Day (October 5th) by telling us about your favourite teacher and why you think they're great!
If there was one thing in the world you could do to help the environment what would it be? [0 responses]
What is your favorite part of helping?