## Kindergarten Science: The Effects of not Being Eco Friendly and Sustainable

(Submitted by Amy Dennis, 2017, while serving as Kindergarten Teacher at Colegio Interamericano, Guatemala)

| Tool(s) used: | Sustainability Compass  
| - | Behavior Over Time Graphs  
| - | Triangles Game  |

| Purpose of using tool: | Generating Questions  
| - | Synthesizing Thinking  
| - | Guiding Discussion |

**Overview:**

Students were asked to think about the effects the Once-ler made to the earth (land, people, animals and economy). We are studying living and nonliving things and students were asked to think critically about how living things affect our everyday life. Students then made their own sustainable goal they would like to achieve over a four week period. Students were able to think critically through teacher question prompts. Students had a hands on, real life experience in order to grasp the concept with the Triangle Game.

| Context of lesson/case study: | Science  |

| Participants (# and description): | 22 students in the Kindergarten classroom  |

| Topic, Theme, or Key Understanding of unit/project: | Living and Nonliving things: The effects of not being eco friendly and sustainable  |

| Length of unit/project: | 4 weeks  |

| Resources/materials & setting required: | Poster paper  
| - | The Lorax book  
| - | The Lorax movie  
| - | Journals  
| - | Daily and weekly tracking paper for chosen goal  |

| Lesson Plan/Description of the Project: |  
| - | Read the Lorax and had a guided discussion about the effects on the land, people, animals and economy. Teacher used question prompts and also facilitated critical thinking.  
| - | Talked about the Compass model and reviewed all 4 areas.  
| - | Students were put into groups of 5-6 and asked to complete the Compass thinking about how the Once-ler affected all areas of the Compass. Students worked together to complete the Compass, writing their ideas in all 4 areas.  
| - | Students shared their posters with each other, adding more information that they learned from other groups.  |
- Group discussion about what the Once-ler could have done differently to be more sustainable.
- Watch The Lorax movie and see if there is anymore to add to the Compass models.
- Play the Triangle Game where some students are fish, bears, swans, trees and lakes (components from The Lorax).
- Students choose two people to stay within ten steps of those two chosen people.
- Discuss the effects of moving, changing certain aspects and components from The Lorax.
- Students then brainstormed in their groups what they can do differently at home or school to be more sustainable.
- Students shared ideas with the class and each student was able to choose their own idea with an end goal. For example, I will ride my bike to school and not take the bus; I will use reusable containers in my lunch and no plastic and trash.
- Students kept a daily record keeping track of their daily goal and weekly journal entries.
- At the end of the 4 weeks students look back and see if they met their end goal and what they could have done differently to meet their goal.

Teaching tips/ideas:
- Some people may think that Kindergarten students cannot grasp the Compass concept, but when each individual student had an end goal in sight and it was hands on learning, they were able to make self to world connections and grasp the concept more.
- Teacher should model a goal she had and show how she completed her goal over 4 weeks as an example before having students choose their own.

Reflection

Plusses (Things that went well):
- Students were able to participate fully and grasp the Compass model.
- Students wrote a weekly journal entry talking how they felt about their process/anything they wanted to about the project.
- Students were engaged and excited to share their information with the teacher, family and friends.

Challenges (Things I would change):
- Teacher should model a goal she has and share the process and end goal with the children first.
- Teacher should involve the parents more for at home goals to be successful.

Suggestions for other practitioners and educators:
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Evidence and Resources:
The Lorax book
The Lorax movie