

Compass Education Level 2: Educator

Applying Systems Thinking for Sustainable School Transformation

It's important to take the next step and turn your learning and thinking into action for sustainability!

Considering all that we learned, use this template to plan for how you will take action for sustainable transformation. Your action plan should include:

- The Sustainable Development Goal you want to address within your own context
- A clearly articulated goal that you want to achieve within a given timeframe
- How you have applied systems thinking tools to create action plan
 - Compass, VISIS Pyramid, Iceberg, Behavior Over Time Graphs, Causal Loop Diagramming, Ladder of Inference
- A timeline detailing how you will achieve your goal

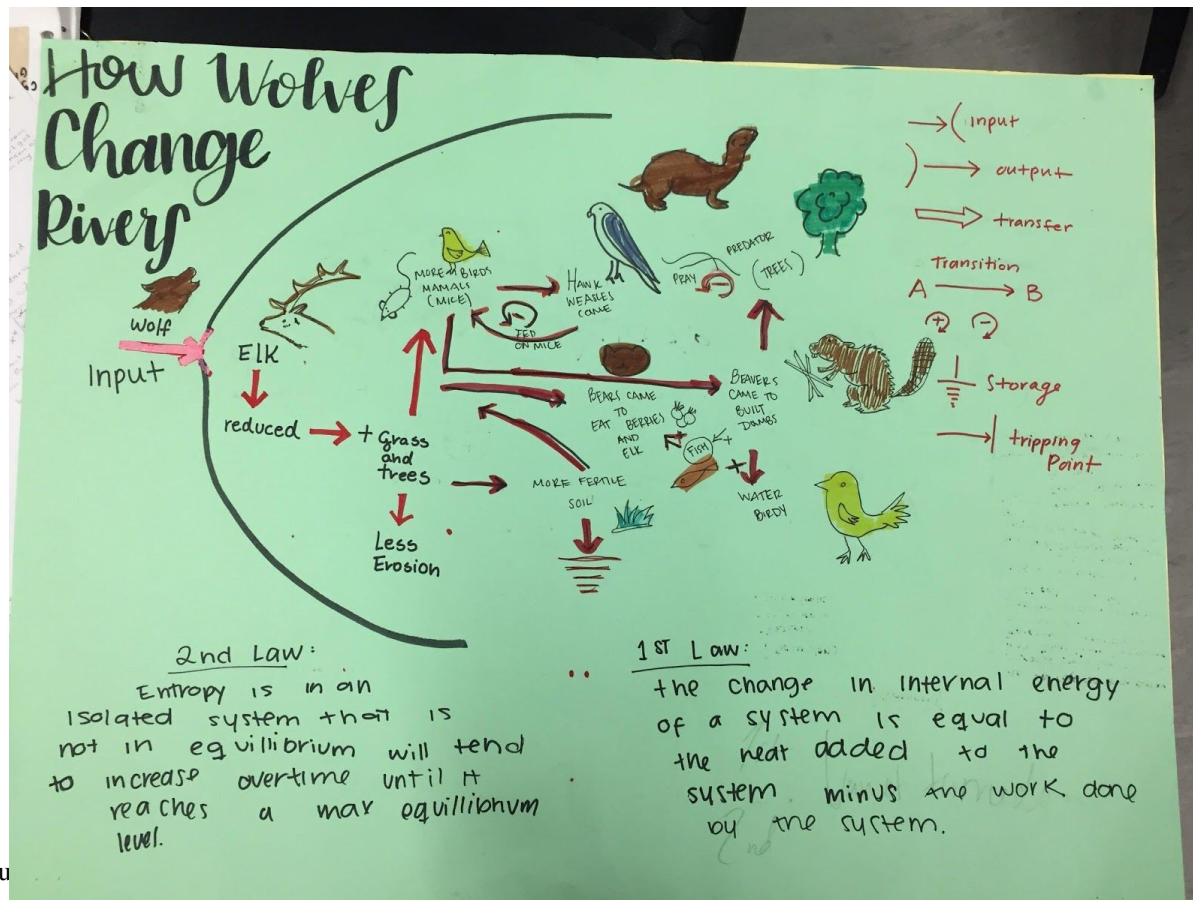
Please submit your action plan to your level 2 trainer who will provide you with some feedback. This will qualify you for Level 2 certification and prepare you to become a facilitator in training!

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1. Sustainable Development Goal: 11 Sustainable Cities and Communities. My context is our school community, a private international school in Mexico City.
2. Students will learn to use systemic thinking tools and environmental perspectives in order to describe how an environmental disaster / issue can be approached and possible solutions can be articulated and if possible, tried. The time frame is one semester course from January 2019 to June 2019.
3. The system tools used with my students were:
 - a. Compass
 - b. Iceberg Model
 - c. Systems diagrams
4. Time-line:

January: Students will describe environmental perspectives: Ecocentric, technocentric and anthropocentric. They will also research and describe major environmental disasters over the last two centuries.

- Students will choose one environmental disaster and described using the Iceberg Model in order to unravel the possible mental models that led to this unfortunate disaster. Sample [HERE](#). of how vaquita marina porpoises became so endangered in Mexico Gulf of California.
- In order to “see” how systems work we will go outside and play in silence the game where each student follows another he/she chooses but without saying it to others. Then there is a disruption in the system and chaos is brought about. A student reflection is [HERE](#).
- They will also watch the videos “How wolves change rivers” and “Parachuting cats” and draw systems diagrams on each one per teams and present them to the class. Image below:



February: Students will describe how ecosystem work through energy flow, cycling of nutrients, first and second law of Thermodynamics, ecological pyramids. The evaluation of this objective is included in the Eco-bottle lab report

- i. Students will create an Eco-bottle: Using PET bottles will make a closed and open ecosystem with living creatures in them. They will collect abiotic and biotic data for two months and prepare a lab report following [THIS](#) format. Within their report they will include a systems diagram of the aquatic system. Sample student report [HERE](#).

March- April: Students will prepare presentations and an evaluation activity on an environmental issue which they will teach to others students either in MS or in LS. This was their summative final project. Sample [HERE](#).

May-June: students will reflect on their own participation and their team's. [THIS](#) is one sample reflection.