

## Newsletter G 4

### Sharing our planet

18<sup>th</sup> Jan 19<sup>th</sup> Feb 2021

#### Central idea

People have responsibilities towards saving energy resources for future generations.

#### Lines of inquiry

- 1) Forms of energy
- 2) Different ways of saving energy
- 3) Why energy must be saved?

In this unit of inquiry first the students became familiar with the energy definition and how energy is produced, and what are the different energy resources. They learned about clean energy resources and renewable ones. Then they tried to pretend if we didn't have energies like electricity, light, heat, and gas or petrol around us, what would happen? They sat in the online class with no light and they turned off the heaters for few minutes and then discussed the situation, they all came to know that how life is hard without the energy resources.

They started to think about the correct way of using energy resources in order to keep energy for the next generations. They realized that why everyone has to save energy. The students gathered information about the energy resources, which pollutes our environment and which are clean and then gave incredible

suggestions to save energy at home. They became more caring and thinkers while understanding the importance of saving energy and using renewable energy resources. They took responsibility for their energy savings. All the students came up with brilliant ideas, and made scientific handcrafts for producing energy from clean and renewable resources.

#### Students' Agency

The students' agency was supported in all six parts of our inquiry cycle.

In all parts of our Inquiry Cycle the Differentiation Base is considered.

Also the students' Agency is supported.

**1) Tuning in:** Mind map, Educational images and videos, bundling. In this part we will try to lead the students to ask about our topics and concepts, and their prior knowledge will be assessed. (Agency)

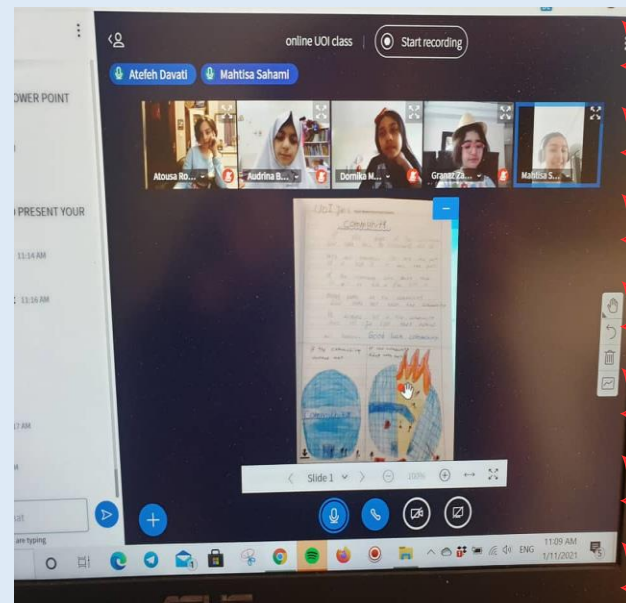
**2) Finding out:** Various related educational sites, Books, Visual images, posters, and Booklets. Also ask experts (online). In this part of inquiry cycle the students will investigate and research, and their research skills will be assessed. (Agency)

3) **Sorting out:** (Based on Differentiation) Students may sort out their findings from their researches to present videos, Make posters, Visual presentations, Build a story (building a critical story. They can choose the way they want to present their findings. (Agency) Also at this stage of inquiry cycle, the students will be encouraged to create their own new knowledge, based on their findings. Here we can assess their knowledge.

4) **Going further:** Student's Agency: Students initiate activities individually or in groups. The students can reinforce their knowledge by asking more questions from each other, they can reflect on themselves and other students' findings, and reflect their researches. They can discuss and share their findings and knowledge, and also assess themselves and the others, kindly. In this way they can become more open-minded.

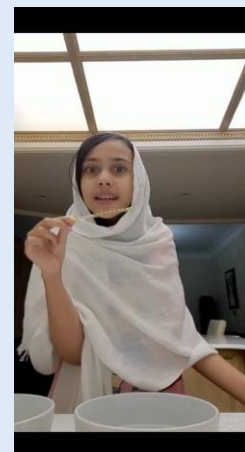
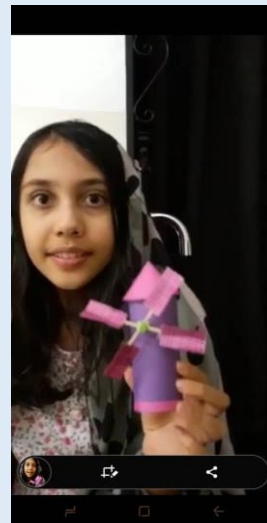
5) **Making conclusions:** The students can compare and contrast any two clean and unclean energy resources and discuss their effects on the environment, and organize their conclusions. In this part of the inquiry cycle the students are encouraged to reflect their new findings and points of view.

6) **Taking action:** **Student's Agency Final Project:** Each student can choose different clean energy resources and give suggestions for saving energy resources and to have a better and clean environment. This project can be held from students in order to understand why we have to save energy resources for the next generations. (Voice, Choice, Ownership) They also are free to choose to present their final project anyhow they like. At this stage of the inquiry cycle students should be able to bring to action, what they have learned, conceptually.





Samples of the students' handcrafts for saving energy models, and their scientific experiments.





Through this unit of inquiry, the students learned more developed multi-digit division and then Fractions.

In language art fourth graders improved their; Grammatical knowledge, Reading Comprehension skills, Writing skills; writing purposely, they also tried to avoid scattered writing, they tried to use correct punctuation marks and paragraphs, and Speaking skills through discussions. All students have increased their Listening skills, during class Library time. They have also developed their spelling and dictation.

The students developed their group work skills, through "Break out rooms" on the Moodle, during the online classes, in this unit of inquiry and also their self-management. They tried to manage their time and their social skills.

