## Hokkaido International Science Fair (HISF)

The first-grade students attended the Hokkaido International Science Fair (HISF) on March 12<sup>th</sup>. Hokkaido Sapporo Keisei Senior High school held it. In a morning session, eight students attended the presentation of a research question. We handed in a presentation movie: "Onuma Environmental Research

~The relationship between Onuma and Livestock~". Two teaching assistants from Hokkaido University graduate school asked the students some questions about their research.



There were a lot of interesting movies.

Students talked about what movie they should watch



They also watched the movie of high schools which they were interested in. They attended an online Q & A and asked some questions to other high school students. They could briefly communicate with the TA and the high school students.

The students answered the TA's questions about Onuma Environmental Research. They needed to answer the question quickly. Therefore, they looked nervous.

In an afternoon session the five students attended the "Science Challenge". They did a co-experiment with students from CMS (City Montessori School) in India.



They adopted a trial product which CMS students designed. The students asked CMS students how to make the trial product. It was little difficult for them to check how to fold the tissue and how to use tape because of the internet connection.

The students dropped a piece of weighted tissue paper with beads from a height of 2M. We use beads to weigh down the paper. They tried



The students talked with CMS students on the Internet. They confirmed procedures how to do the experiment. TA supported their communication.

to make the tissue paper's flight as long as possible.

They cut or folded the paper in several ways and then. Sometimes they measured time it took to fall. They talked with CMS students about the experiments' data and discussed how to improve their trial product. The Japanese and Indian students cooperated with each other well.

At first the students struggled to communicate with foreign students in English. It was hard for them to do the co-experiment on the Internet. However, The TA supported them properly so they could improve their products well and both countries students worked it out gradually. Finally they could feel a sense of achievement each other.



The students measured the time for the tissue, with a bead, to fall down on the floor.

At first, the tissue paper fell fast, but they attempted several times, its flight duration became longer and longer. They shouted with joy every time. They adopted the CMS trial product and attended a "Science Competition".



After they made the same products, they attended a "Science Competition". 17 teams took part in the competition. Japanese and Indian members made their products together. They dropped their products from 2M and measured the time for the products to hit the floor. They competed with each other for their total time.

The competition was held using Zoom. All participants could show the experiments. The students' record was almost the best time in the Competition. They doubled the flight duration time from the first trial.



The students looked tired because they had to communicate with foreign people in English for a day. At the same time, they felt happy they could communicate with foreign people and do the coexperiment. Through these activities, the students might realize that they felt happy when they could communicate with English and when they could make the same things with foreign people. From this year, Chubu high school became a SSH. We could attend such an interesting program. We appreciated for Sapporo Keisei high school for giving us a chance.

One of our SSH project's goals is to grow up "Global Scientists". The first year we hoped that our students will be interested in science and want to learn about it deeply. We also want them to realize the importance of English when they communicate with foreign people.