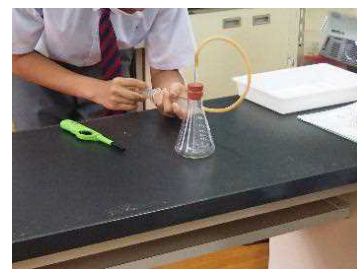


April, 2015

#1 What is a specialized subject “SSH Research I”?

Welcome to part 1 of the 3 part SSH Research I Earth Science lecture! Since there are only 3 classes for this earth science lecture, the first class involved topic selection and literature review. Students began studying how to make clouds using research conducted by students from the previous year. While it would have been ideal to have an original theme, there are only 3 classes for this lecture so there was no time to waste. Borrowing the topic and hypothesis, students proceeded to search for experimentation methods on the Internet.

After searching, they decided to attempt the well-known experiments of creating a cloud in a flask and creating a cloud in a plastic bottle.



Student Reactions:

- I thought that clouds are only made in the sky, but we can recreate them by using plastic bottles and flasks
- I was surprised because I didn't expect that we'd be able to produce clouds with plastic bottles and flasks.
- It was easy to understand because I researched about it before conducting the experiment.
- I found that clouds can be made easily. I wonder if it is possible to make a classroom filled with clouds.
- I have never thought about how clouds are formed. I want to learn more about them.

#2 SSH Specialized Subject “SSH Research II”: Let’s decide a research topic!

Groups having been decided in the previous academic year, April saw the start of topic selection. Groups discussed ideas and proposals from the previous year among themselves and with a supervising instructor to finalize their topic choices. Once topics had been tentatively decided, every group was busy with preliminary experiments and checks before starting their actual experiments.



#3 SSH Specialized Subject “SSH Research III”: Writing a research paper.

Third year students have started to write their research papers based on the results of the SSH experiments conducted in the previous academic year. Writing these papers is a first for Kyuyo High School so it is a challenge for students as well as teachers. All groups must compose their abstracts in English and a few select groups must write their entire research paper in English. The hope is that these research papers will become great examples for future generations of Kyuyo SSH students.



May, 2015

#4 Meeting with professors from the University of the Ryukyus: Discussions on proposed research topics.

On May 20th, a number of biology and chemistry teachers from the University of the Ryukyus visited the SSH Research II class. After listening to students' ideas for research topics, they were able to give advice on how students could improve their research and experiments. Students were understandably nervous, but thanks to this experience, they were able to visualize the direction of their research, find out what other groups were doing, and get an overall grasp of the current situation. Additionally, thanks to the advice from the teachers, groups were able to further improve their research. Since many of the groups had biology or chemistry topics, this visit was extremely useful.



#5 Meteorological Society of Japan Junior Sessions in Tsukuba

On Saturday, May 23, 2015 the Meteorological Society of Japan Junior Session was held at the Tsukuba International Conference Hall. Seventeen schools across Japan participated in this event. Three juniors who belong to the Earth Science Club at Kyuyo High School took part in the session. They gave a presentation entitled, “Study of the Mechanism of Tornado Formations in the Kanto Plain.”

During their presentation, many meteorologists who were attending the session asked questions and gave a few words of advice. The students also had the opportunity to meet researchers whose work they had previously used. The researchers showed them a video of their university’s device that is used to recreate a tornado. These students felt that they were able to learn many useful concepts from giving a presentation.



Student Reactions:

- This was our first experience taking part in the Junior Session in Tsukuba. Although we felt very nervous, we were able to give a wonderful presentation. There were many people from the Meteorological Society at the Junior Session. They listened to our presentation with great interest and also asked some questions that we didn't have the answers for. We were then able to determine our next steps for future research. Thanks to the Meteorological Society of Japan, we were able to learn a lot of new concepts.
- The Junior Session in Tsukuba was a very nice experience for us. Many people came to see our poster and they gave us their professional opinions. Although we felt very nervous, we enjoyed ourselves. There wasn't enough time to give our presentation due to the busy schedule. I would like to interact with more people if I have the chance to take part in it again.

#6 OIST Science Lecture: The Ways of Ants

On Thursday, May 28, 2015 Dr. Evan P. Economo, from OIST, came to the SS Lab to give a presentation. Dr. Economo, who is an expert on ants, spoke mainly about them and biological diversity.



Student Reactions:

- I could hardly understand his English, so I was glad that there was an interpreter. I want to learn English so that I will be able to understand the language without interpretation.
- I learned that there are various kinds of ants that live in the desert. Many of them store honey in their bodies, fly in the air, and other things. I was surprised by the fact that queen ants work.
- It was fun since I understood more of the presentation than I thought I would. However, there were still some vague areas, so I want to study English more.
- Since I learned about ants in the SS Lab I thought I had enough knowledge about them. However, I realized that there were many things I still didn't know. I was able to see that there is still a lot more to learn about the world of ants.
- I think the actions of some ants resemble ours in many ways. Therefore, I think we can manipulate their behavior in the SS Lab.