

2017

**Science Communication for Global Talents/
Science & Technology Design for Global Talents
– Overseas Programme –
Report**

“Science Communication Research Group”

■ **General information**

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Organisation	Science Communication Research Group (SCRG)
Person in charge at Organisation and His/her position	Prof. Michael Norton
Schedule	19 August – 1 September 2017

■ **Summary in English**

All science communication organisations we visited; namely; Science Museum, Parliamentary Office of Science and Technology, Royal Society, Royal Academy of Engineering, British Science Association, Royal Institutions, and Wellcome Collections. are working toward the same goal of promoting science in everyday life through different approaches according to their target groups.

For instance, science museum targets all ages, POST provides information specifically on issues related to policy making for the parliament and BSA focuses on organizing event to encourage people with little to no interest in science to enjoy science. To achieve their goals, many people from various fields, science and non – science have to work together.

From the information acquired during this trip I summarized that the heart of science communication is to integrate science into everything. Science should be perceived as a part of culture that people can either be enjoyed or used as a tool to pursue deeper understanding of the world. The normal stereotype of science – as a boring subject, can be cleared if it is presented in

a proper way.

Finally, this extraordinary experience of culture and knowledge opens up my perspective and inspires me to work as a medium between science and the public as well in my future.

■ Objective

My reason for attending the programme is to learn the role of science communication in a developed country like UK, experience culture in UK and get inspired by people working in the field.

I chose to participate in SCRG because I would like to see the difference and similarity between many SC related organisations and see the big picture for this field of work. With the knowledge obtained from this programme, I hope I can point out something science communication in Japan and my country is lacking and improve my skill of information providing.

■ Detailed schedule

20 August 2017 (Sun)

Arrival at the accommodation in Cathcart Road 90, Greater London.

Since Big Ben, the famous bell inside the clock tower in Westminster area, will be silence due to its maintenance for 4 years from 21 August on, we went to hear its sound and explore around the area.

One idea that strike me on the first day is the diversity in this city, different style, different skin colours, even different design for the station name sign. Unlike collective society of Japan and Thailand, London celebrates great diversity.

The atmosphere whispered to me, "Here, you can be different."

21 August 2017 (Mon)

Our programme started at Science Museum. Every ages and genders are excited by the museum. Susan Mossman narrated us around many galleries. She told us about the process of setting up exhibition and story behind each object. She mentioned about the difficulty of setting up the slippery parachute from Tim Peake's spacecraft and guided us into the lives of scientists behind steel industry through big steel processing engine.

I talked with a volunteer in an exhibition about robot. When I asked for his inspiration, his first answer involved a robot comic he read as a child. This emphasized the importance of media influence on children which means that the approach of science museum is in the right path.

In a zone called 'Who am I', I was impressed by how the media is exhibited in suitable position for the targeted audience, for example; content for kids is presented at a kid's height with suggested question for parents at adult height.

Science Museum team also told me about a baby sculpture hidden on the floor used as a thought provoker. A sight of baby on the floor initiates various interesting reaction on each audience because infant usually induces sensitive feeling in human. This exhibition shows how arts is used in the museum.



Science Museum

Who am I

22 August 2017 (Tue)

SCRG had a free morning to explore the city, SOHO and Westminster, by ourselves. We visited Parliament Office of Science and Technology (POST) in the afternoon.

We got a very exclusive chance to get through an airport-like security into the parliament building together with the first POST's director, Professor Micheal Norton. POST is a small section that provide scientific information related to policy making and link researchers with politicians. POSTnotes, their document summarizing difficult topic within 4 pages, can be easily accessed through the website. We learned how science communicators approach specific group of audience.

After a detailed discussion about the organisation, we went on an unofficial tour around the parliament. We learned about structure of British parliament and history. When the schedule ended, we continued to discover building around Westminster, street art in Trafalgar square, and the community in Covent Garden and then back to our accommodation.



SCRG in Westminster area

23 August 2017 (Wed)

Our destination today is Royal Society. Prof. Kaith Moore introduced many famous fellows to us, not only general information about each scientist we usually get from the internet but interesting network between many of them. Most of the equipment stored in the area was designed and made by the scientists themselves. This reflects the creative and multidisciplinary mind. Prof. Moore told us how science is not a subject but a set of method involving observation and repeated experiment. Therefore, scientist is never limited to just one topic but anything in their interest. He also showed us important evidence like Principia of Mathematica and signatures of the fellows. We listened to many operation teams including education outreach, press office and policy team.

The story that impressed me the most is about Robert Hooke. Even though he was not the first one who published a book about microscopic world, his book was famous because Hooke included many illustrations in it. This shows us the importance of suitable communication method.

In the afternoon, we went to Royal Academy of Engineering which is a similar organisation to Royal Society but for engineers. We learned that UK is lacking workforce in engineering. Even though the academy has engineer-related title, many of the staffs are from other fields.

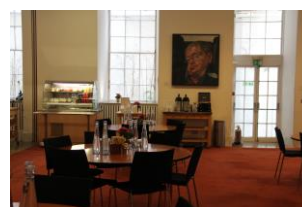
An interesting information I found today is about UK education's problem. In many Asian countries, children say name of occupation they want to be without knowing detail about it, so we have many students in engineering who study it just because it sounds cool. In contrast, children in the UK know that they want to invent something in the future, but they do not know which career path they have to take. The problems are different but both can be fixed through science communication.



Fellows' Signature



Meeting room in RS



RS's cafeteria

24 August 2017 (Thur)

We visited British Science Association (BSA). This is the first organisation we visited that is a charity and has more female staffs than male staffs. This seems to be reasonable since the main work for BSA is organising science-related event for general public and women are more into this kind of work. The staff we met used to work as an event organiser and a journalist for Nature. BSA tries to promote science as a culture and targets people who has no interest in science, so most of the events is conducted to catch attention from normal pedestrians. They approach science the same way people approach music, one can enjoy it without studying its principle. BSA also uses infographic, VDO clip and other modern media to convey message. Since

the charity is small, it has high flexibility, creativity and dynamic.

We spotted a bubble show for kids during lunch and moved to Victoria and Albert museum in the afternoon. There are numerous historical objects. I listened to audio guide available online and enjoyed the European history. There are also many exhibitions about usage of different material in history and in current status quo. The coexistence of exhibitions about ancient history and modern technology emphasizes an idea of evolving without abandoning our root. On the way home through Imperial College and Hyde park, we enjoyed the atmosphere of a normal nice day of Londoners.

25 August 2017 (Fri)

Royal Institution is where Michael Faraday used to work at. We listened to work of Michael Faraday, Humphry Davy and many other scientists. New laboratory is settled next to Faraday's old office. We learned that scientists with familiar name do so many other work more than the ones we are familiar with.

Scientific instruments look magical when they are presented as artistic oil paintings.

We experienced atmosphere in a pub nearby. After that we walked along Piccadilly Circus and Oxford street. We visited Hatchards, the oldest bookstore in London. They were celebrating their 220th year of opening.



Atmosphere at the hub

Stores in Oxford street

26 August 2017 (Sat)

We went to Buckingham Palace in the morning since the palace was opened for public visit in summer. Royal gifts from around the world are displayed around the gorgeous rooms inside. The gifts are considered valuable for the offering countries so the different value can be examined. We saw old sculptures in contrast with modern switched and plugs for electricity.

27 August 2017 (Sun)

We went to Chelsea stadium located near our accommodation. The atmosphere was heated up because there was a football match that afternoon. In the area, there are players' profile exhibited beautifully on the wall with pictures and statistics. The information is very specific but appeared to be impressive to normal audiences as well. We can see how communication skill is used for non-science purpose. In the afternoon, we visited St.Paul's then observed local's activity near Tower Bridge. Then we watched a free Odyssey play near the bridge.



Chelsea Stadium



near Tower Bridge



Free Odyssey Play

28 August 2017 (Mon)

I spent 7 hours exploring the British Museum. The exhibition cooperated with Wellcome gallery about number of medicine one takes within a lifespan is very interesting. I enjoyed learning about history of the whole world. Among historical information, there is knowledge about how archaeologists examine specimens with scientific methods. It shows that science is a crucial equipment for every other discipline to find out the truth. This reminds me of BSA method of introducing scientific information together with other subjects.

I also walked around King's Cross station to see the atmosphere.



British Museum



King's Cross station

29 August 2017 (Tue)

We took train from King's Cross to Cambridge and stayed there for the whole day. We observed the atmosphere of one of the world's best universities and enjoyed the scenery while sitting on a punting boat. The university and the city itself coexist peacefully. We also explored bookstores, galleries, churches and shops.



Cambridge

30 August 2017 (Wed)

In the morning, SCRG's undergrads went to the British Library. I admired the facilities, active community and rich catalogue of books and manuscripts. We also explored the treasures of the British Library; for examples, Magna Carta and the Beatles' lyrics.

In front of the world's second largest library sit a giant statue of Isaac Newton with his compass in his hand. When you scan the QR code at his base, the statue will ring you and talk to you. This is a part of Talking Statues London project along with 34 other talking statues around the city including Sherlock Holmes, Queen Victoria and even Dick Whittington's cat! This project has an intention to make people look at the public art around them longer and more deeply.

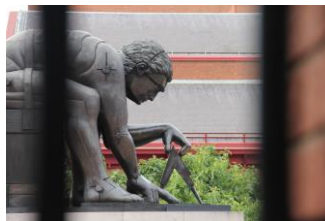
After that we wandered around Wellcome Collection with Prof. Norton and a staff from the gallery. We discussed about objects presented from science and art points of view. Personally, I really like this museum for its interactive relationship with users and its question-raising pieces of arts.

The exhibition at that time is 'A museum of modern nature' – a collection showing objects that relate modern people with the nature. The exhibited items varied from toy weapons made from wooden stick and stone from three boys under the age of 8 to a thermos flask that allows a 57-year-old woman to explore the nature without getting too cold. This exhibition invites us to rethink about our own interaction with nature and even further beyond that.

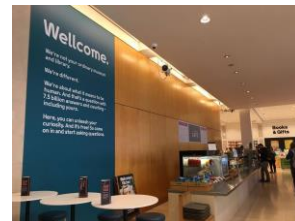
We then joined SM group to experience LATES event at Science Museum which has a totally different atmosphere from the normal time. Since the audiences are more mature, vulnerable specimens can be presented and discussed in a deeper level. We got a chance to join a meeting among LATES volunteers. The meeting was full of passion, excitement and laughter. I counted the number of volunteers and found out that the male: female ratio was roughly 2:3. From my observation I feel that male works more in policy-related organisation while more female involves in event organising or art-related organisation. The event was a nice one to be marked as the finale for this programme.



The British Library



The talking statue



Wellcome Gallery

Results

I accomplish all my initial objectives.

Since SCRG visited various organisation, I learned about their different approaches for similar goal, promoting science in the society.

The crucial issue is knowing the audience and what they want, then link them to the source of information. Science communication is not about educating the public but creating relationship between people and science in deeper level so they want to learn by themselves.

During the programme, I was amazed by unfamiliar scenery of London. I gazed out of the window of the bus at all time and spotted the beauty of the world more than normal. Unlike me, other residents just sat there indifferently. Unintentionally, a question popped up in my mind, "When do people stop looking out of their windows?" I then realized that a person should not stop observing and appreciating the world at all. This changed my perspective and made me focus more on small detail in my every day.

I remember an impressive sentence from a British Museum volunteer, "The exhibited item doesn't have any meaning until someone walk to it and listen to its story. People don't just do that so that's why I'm here!" That concludes the role of science communicator.

■ Future prospects

From the idea that any knowledge can be enjoyable if presented in a proper way. I would like to be a bridge between experts and public in whichever field I work in the future. I learned the importance of connection and presentation skill, so I will prepare them in advance.

■ Suggestion

You should utilize all the time you have effectively. Apart from Science Museum, there are many other free access museums around. I recommend the British museum and Victoria and Albert museum. British museum has many important historical objects from all around the world while Victoria and Albert museum focuses more on European history. You will get extraordinary chance to see objects from your history book and experience additional communication technique.

To enjoy many statues around London more, it would be beneficial to study British history in advance. Watching movie or reading stories based in the United Kingdom such as Harry Potter, Notthing Hill and Paddington will also promote your interest in the city. Spending some time just wandering around the town observing people's lifestyle is also recommended.

Finally, I would like to emphasize the importance of talking to people. You can learn something you cannot experience by yourself from their experience.