

実践報告

Establishment and activities of “Sakura Science Club” in Ho Chi Minh City University of Pedagogy

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〈Abstract〉

As part of the Sakura Science Plan—a short-term exchange program supported by Japan Science and Technology Agency (JST)—a collaborative program, namely Sakura program, was established between Mie University and Ho Chi Minh City University of Pedagogy (HCMUP). In each year 2015 and 2016, this program facilitated ten students and two supervisors from HCMUP to visit Japan for ten days to experience science education in Japan through a variety of laboratory activities, museum and high school visits. These trips helped widen participants’ view about science education and led to the establishment of HCMUP Sakura Science Club (HSSC)—a club where members of the Sakura Science Plan gather to share what they had learned in the program to community. This paper reports on the foundation, development and challenges of HSSC.

Key words: *Sakura Science Plan, International Exchange, Science Club, Vietnam*

INTRODUCTION

As its name implies, the purpose of *Japan-Asia Youth Exchange Program in Science*—also known as *Sakura Exchange Program in Science*—is to “promote understanding and cooperation between the young people from Asia and Japan who will play a critical role in the future area of science and technology (S&T) in their own countries.” [1] As part of this effort, a Sakura program between Mie University and Ho Chi Minh City University of Pedagogy (HCMUP) was initiated in 2015. [2] In this program, Mie University invited 10 students and 2 supervisors from HCMUP each year to explore science education in Japan through visits to laboratories, high schools and science museums, and attendance in science lessons in Japan. The most significant result of this program is the foundation of HCMUP Sakura Science Club (HSSC) where members of the Sakura program join to share their experience in the

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program with their community.

In this document, we report on the activities of HSSC before and after the Sakura program 2016. We will start with a general description of science activities in Vietnam, followed by the establishment and activities of HSSC. We conclude with a discussion for future directions and challenges confronting HSSC.

SCIENCE ENLIGHTENMENT ACTIVITY IN VIETNAM

In Vietnam, science is taught from elementary to high schools. At middle and high schools, the three science subjects (chemistry, physics and biology) are taught separately. In science lessons, students often study abstract contents and cram knowledge to prepare for examinations. The curriculum and teaching methods used in science subjects are heavily exam-oriented. In just a few schools, students are provided opportunities to get involved in scientific research. Science clubs as well as science outreach activities are not popular at schools as well. However, science subjects are seen as having a privileged status because they are used for higher education entry. Paradoxically, science at schools seems not to be fun, relevant and meaningful to students.

In Ho Chi Minh City, there are very few public places that provide an opportunity to expose children, at an early age, to the amazing world of science and nature such as museums or aquariums. [3] There is an increase in the number of private centers or clubs that offer fun science programs for children, but the participation fees are usually expensive and hence, these programs cannot reach a large population of students in the city. There are also a few science clubs that host free science programs for children at schools or in communities. The demand for more such science clubs is pressing in HCMC where the young population is highest among the country and there are many efforts to add fun to science learning, to excite and develop a lifelong love for children and young people.

ESTABLISHMENT OF HSSC

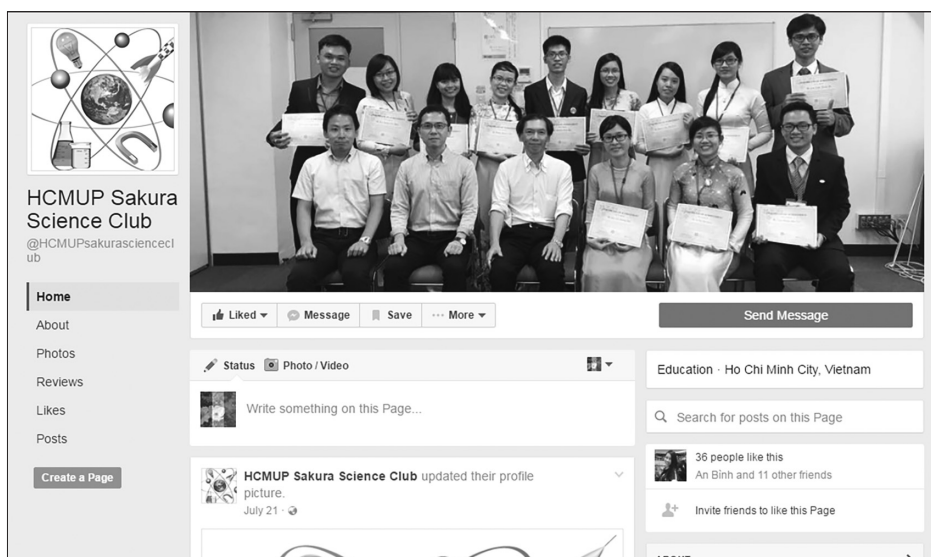
The ten-day Sakura program in 2015 helped broaden the participants' mind, enhanced their knowledge and boosted their confidence and determination to become agents of change in Vietnamese science education. A few months later, during the preparation for the Sakura 2016 program, HCMUP Sakura Science Club was initiated to help recruit and prepare students for participation in the Sakura 2016 program and to connect Sakura participants

from the two programs into one group.

The activities of HSSC are aimed at

- introducing the Sakura Exchange Program in Science to students at HCMUP,
- developing students’ awareness of and concern for scientific issues in personal, social, environmental and technological contexts,
- arousing and cultivating Vietnamese students’ interests in learning science,
- strengthening the relationship between Mie University and HCMUP.

Right after the Sakura 2016 completed, HSSC was officially established with the approval of the deans of physics, chemistry and biology departments. The advisory board of the club includes all the leaders of the Sakura program 2015 and 2016. The chairman of the club is Tran Cong Hieu who is a senior chemistry student. All the participants of the Sakura 2015 and 2016 programs are members of the club. The club also created a page on social network for discussing and sharing of scientific and educational information among members and friends. [4]



The establishment of HSSC has a significant meaning to science education in Vietnam. The participants in the Sakura program and HSSC are students in physics, chemistry, biology education majors and will be high school teachers of these subjects in the near future. The Sakura program broadens their perspective about science education and HSSC provides opportunities for them to apply their knowledge from the program to practice. These

knowledge and experiences are valuable for their teaching practice and for their students' learning.

ACTIVITIES OF SAKURA CLUB

Before the Sakura 2016 program

Although HSSC was officially established after the Sakura program 2016, several of its activities of Sakura participants had been carried out before the program.

Upon recognition of the importance of knowing basic Japanese language and culture to the participants of the Sakura program, a class about Japanese language and culture was hosted by HSSC for the 10 successful candidates who were selected for the 2016 program to prepare for the trip to Japan. This one-month class, which was considered the first activity of HSSC, was instructed by Dr.Vinh Pham-an alumnus PhD student from Tokyo University of Electronics and Communication. During that time, the members of the club prepared and rehearsed the science drama Son Tinh-Thuy Tinh which would be performed to students and teachers at Mie University during the program.

On the final day of the program in Japan, participants made presentations of their work and experience of the program. They also introduced the plan for HSSC after they returned to Vietnam. All of the participants showed their appreciation to the support of JST and Mie University. They performed the science drama Son Tinh-Thuy Tinh (the God of the



mountain and the God of the water) which was one of the famous Vietnamese myths to Japanese teachers and friends. The drama was integrated with several interesting science experiments and traditional Vietnamese music. From the drama, Japanese participants knew more about Vietnamese culture and the beauty of science.

Meeting with students and teachers at HCMUP

After returning from Japan, HSSC members hosted a meeting with students and teachers of chemistry, physics and biology departments. In the meeting, they reported on what they had experienced and learnt from the trip. The Sakura members raised a question “Japan



does not have a lot of natural resources but a lot of natural disasters instead. So why is Japan such a global power?” and they believed that the key for Japan power is the Japanese people. There are many characteristics that make Japanese people admirable worldwide. They shared what they had seen

with their own eyes such as the utmost sense of Japanese community everywhere, the honesty and a mysteriously unique and rich culture. The Sakura-ers once again performed the show Son Tinh-Thuy Tinh drama and officially announced the launch of HSSC to the participants.

Also, in this meeting, the leader and participants of Sakura 2015 and 2016 program encouraged other students to take this valuable opportunity next year to learn about science education in Japan.

Stem Day for children

One of the objectives of HSSC is ‘to arouse and cultivate Vietnamese students’ interests in learning science’. Therefore, the club collaborated with Stemhouse Education to organize an event for 150 children aged 6 to 13. In the events, HSSC members worked in teams of two or three to perform half-hour science shows whose formats were similar to the museum shows in Japan. The shows explored several curious science topics that made children kept asking why and how. Each team of Sakura members were in charge of one science topic, including Balance and center of mass show, Fire and water show, Heat and gas show, Balloon car

competition, Magic color show and Blowing balloon competition. The children were divided into groups of fifteen to twenty for turn-taking various shows. In each show, the kids watched experiments, interacted with the performers and conducted the experiments themselves.



FUTURE DIRECTIONS OF HSSC

- Continuously update the social network page with news about science, technology and scholarships in areas of S&T.
- Attract more HCMUP students to join the club.
- Offer science projects and activities for children at primary, middle and high schools.

CHALLENGES FOR THE FUTURE

The Sakura club has a great advantage in that the establishment of the club has approved by the Deans of the three Science Departments and supported by the teachers (supervisors) in the Sakura programs. However, it will be confronted with two primary challenges.

First, the participants in the Sakura program are from different academic terms. Since they returned from the Sakura program, some of them graduated from HCMUP and moved to live and work in other cities. Therefore, it is not easy to gather all of them for a particular activity of the club. Besides, all of the participants are or will be teachers, thus they would be busy with their work and can hardly get involved in club activities.

Second, the funding for the club is limited. The initial fund of the club was from the contribution of the members. Of course, the club needs to attract more sustainable funding to ensure continuous operation and quality programs, especially free programs for the community.

The club advisory board and members will work on thorough short and long-term strategic plans to deal with these problems.

CONCLUSION

The establishment and operation of Ho Chi Minh City University of Pedagogy Sakura Science Club was the most significant evidence for the success of the Sakura Science Programs in 2015 and 2016. The club is hoped to be a launch station from which talented and enthusiastic science teachers start their career.

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ホーチミン市師範大学における 「さくら科学クラブ」の設立と活動

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〈要 旨〉

JSTの「さくらサイエンスプラン」の支援を受けて、2015年と2016年にホーチミン市師範大学から10名の学生と2名の教員を招へいし、三重大学での授業参加や先端研究の見学、高校の授業や科学クラブ参観、および科学館等での体験学習からなるプログラムを実施した。参加学生らは、この体験を基盤として、ホーチミン市師範大学に「さくら科学クラブ」と名付けた科学クラブを設立した。このクラブでは、プログラムで学生が学んだことを地域で共有することを目的としている。ここでは「さくら科学クラブ」の設立までの経緯、クラブの活動、および今後の計画について報告する。

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