

TFSCALE2015: 

An ASEAN exchange programme that transcends borders

Into its second year, the Temasek Foundation Specialists' Community, Action and Leadership Exchange (TF Scale) programme has grown not only in breadth but also depth. SARAH PINO reports.



THE FRIENDSHIP SCALE: All the students from Cambodia, Myanmar, Indonesia and Singapore went to Marina Barrage as one TF Scale group. **PHOTO: ISKANDAR ROSSALI**

It started out with a modest selection of students and was confined to just two ASEAN countries. TFSCALE 2015 marked a new milestone with the inclusion of Myanmar into its ranks. It started as a leadership exchange programme for young people, to learn from each other and come up with innovative projects and ideas that can help communities.

Kicking off the inbound programme, the first leg saw a total of 75 scholars from Cambodia, Myanmar and Indonesia coming to Singapore work on specialized projects with 75 Republic Polytechnic (RP) students from three main schools: School of Infocomm (SOI), School of Engineering (SEG) and School of Applied Sciences (SAS). Helping them document the process by writing articles, taking photos and videos are 12 embedded student journalists from Centre for Enterprise and Communication (CEC).

From the time they arrived on 5th October, the TF scholars from ASEAN hit the ground running – by working extensively on their respective projects – which ranged from coming up with a chip that can sense movement to help keep track of frail elderly, to coming up with ideas for sustainable sources of water and energy. All these projects will be tested or delivered when the Singaporean students head to the various countries during the outbound portion of the trip in March 2016.

Dr Mervyn Yeo Vee Min, 39, a Biomedical Science lecturer from SAS said: “As the students are immersed in the 3-week inbound programme, they get to learn more about Singapore, be it culture, language, as well as technology.

INSIDE!



WHAT IS COOKING WITH EACH PROJECT (PG 2)



TF SCALE 2015 PHOTO HIGHLIGHTS (PG 4)



LET'S HEAR FROM THE SCHOLARS (PG 8)

It was our aim to allow good contact time for students to learn and experience new technology in various industries.”

Students also visited the NEWater plant, an old folks home and Singapore Discovery Centre.

Ban Teav, 18, a Cambodian student said: “NEWater is so useful. I want to recycle water to help my community in Cambodia.” The overseas scholars spent a sizeable amount of time exploring Singapore with the local students. For many, this was their first time in Singapore and they marvelled at what a clean, green and orderly city it was. Students also enjoyed the key tourists' sites like Marina Barrage, Marina Bay Sands and Resorts World Sentosa.

“When I visited Marina Bay, I was inspired to be a better engineer,” said Fauzan Ali, 21, an Indonesian student who said he wants to build beautiful buildings at home too.

The gift of good, clean water

By SARAH PINO

The scholars from Cambodia and School of Applied Science (SAS) students sat together to quench their thirst after a game of Captain’s Ball. The water that we drink without a thought is clean and doesn’t make us sick. In Cambodia though, many people still have no access to safe drinking water.

That was the task for the Cambodian and SAS team: to come up with a simple filtration system that will provide clean, potable drinking water for community centres and schools. In addition to creating this system, they also have to build an Aquaculture Pond that will sustain the harvesting of seafood throughout the year, no matter Cambodia’s extreme wet and dry seasons. Cambodia’s climate makes it difficult to sustain important sources of protein such as fish to make their Samlor Machu Trey (Sweet and Sour Soup with Fish) and Fish Amok (Steamed Coconut Fish in Banana Leaves).

Dr Mervyn Yeo Vee Min, 39, a Biomedical Science lecturer and the staff leader for SAS said: “Framing these activities around a cohesive atmosphere of collaborative learning between Cambodian and RP students was important. It was heart-warming when the Cambodians shared that they enjoyed the daily activities very much, and they thought the PBL way of teaching and learning rather refreshing, unique and fun.”

Like the other two teams, it was not just the work that made the outbound trip successful but the fast friends the two teams made. When asked what his favourite part of the program was, Cambodian Pel Cheapanhasith, 20, a Royal University of Phnom Penh student smiled and said it was a Singaporean friend he made.

“Jia Hao. Jia Hao is my best friend. He always brought me to swim or play football. I will never forget him.”

INDONESIA



FINISHING TOUCHES: TF Scholars from Indonesia worked hand in hand with the students from School of Infocomm of RP to finalize their final product of their project before presenting it to the rest.

PHOTO: NURUL LYDIA

CAMBODIA



TEAMWORK IS KEY: A student from SAS, Muhsin Bin Mohammad (left), 19, guided a group of TF Scholars from Cambodia in one of the projects that functions similarly with a bio-sand filter.

PHOTO: ISKANDAR ROSSALI

The Life of Pi

By NURUL LYDIA AND NUR FATHIAH

A lonely death of an elderly in his house which went unnoticed for one week was a trigger that became a source of inspiration for a group of students who were determined to create an information system that detects motion - if there are no sensors indicating movement, a message will be delivered to the nurse who will then go and check on their residents.

Teams from Republic Polytechnic’s (RP) School of Info-comm (SOI) and three polytechnic teams from Indonesia worked together to come up with a credit-card sized computer that can be used to help elderly such as the one they heard about.

Called the Raspberry Pi - it is designed to teach young people computer programming. Powered by a USB phone charger, people from around the world have been using Raspberry Pi for many different projects due to its size, portability, cost, program ability and connectivity.

Mr Jason Lim, a lecturer from SOI said: “Raspberry Pi is also one of the platforms forming the building block of IoT (Internet of Things). With PM Lee’s vision about Smart Nation, this is largely the direction of learning. Being an IT student, this is the forefront of technology and the new trend how technology could be used to enhance the daily life.”

On the third day of the inbound programme, Temasek Foundation Scholars from Indonesia went on a half-day trip to Evergreen Circle, an elderly home in Singapore, to get even more ideas for their project. In March next year, it will be the Singaporean students’ turn to work on a similar project to solve another social problem.

The cross cultural partnership was more than work. A scholar from Politeknik Negeri Malang, Adzikirani Dicky, said he gained much insight when working with his Singaporean counterparts.

“I like to work with new people, people that I don’t know. It’s a new experience for me. Also, the facilities in this campus are very good and nice, compared to my campus back in Indonesia.”

Leading Light

By NICOLE KAM AND VERONICA MARIA

With a flick of a switch or a push of the button, Singaporeans are privileged in having electricity readily available. This, however, is not the case for some monastery schools in Myanmar, an ASEAN neighbour. In order to solve this problem, scholars from Yangon Technological University (YTU), and Republic Polytechnic’s School of Engineering (SEG) came together to co-develop a solution to improve lighting conditions there.

To ensure a reduction in cases of power failures in these schools, the teams aim to install a photovoltaic system that will allow the sun’s energy to be harvested and converted into a stable source of electrical power.

It would take approximately five days to complete the whole process, including the planning, purchasing, and installation and troubleshooting of parts. Both local and overseas students were actively involved in wiring, putting together the final components and installing lighting system for the classrooms.

“What is most important is that through the activity, both institutions are able to learn from each other, build up friendship and at the same time do something meaningful to the society,” said Dr Lieu Chee Fui, 34, a Renewable Energy Engineering lecturer at RP. “I am always delighted to witness the transformation of students when they participate in such projects and achieve something in life.”

However, it was not all work and no play for the scholars. They took the chance to explore Singapore’s attractions such as Universal Studios Singapore (USS), Singapore Discovery Centre, Marina Barrage and Gardens by the Bay.

MYANMAR



BONDING OVER SOLAR TOYS: TF scholars placed the solar toy under a 100 watt halogen lamp, after building it with their assigned buddy from Care Corner, ensuring that the toy works.

PHOTO: FEBBY LEE JIA QIAN

“I really like Universal Studios because I have never seen such a place in Myanmar,” said Phylli Phylli Thin, 18, an Electrical Power student at YTU. “There is a Transformers ride, a 3D roller coaster and I have never been on one before. I was really excited!”

Singaporean students learnt much from their counterparts.

“Looking at the scholars from Myanmar, it makes me more motivated to never stop learning new things, they really impressed me with their enthusiasm,” said Adrian Tan Sen Fen, 21, an Aerospace Engineering student. “With technology readily available to me for learning purposes, I should be even more motivated than them!”

In March 2016, the SEG students will fly over to Myanmar in order to implement the final step of installing photovoltaic systems and solar panels, wrapping up the exchange programme there.

TEMASEK FOUNDATION ENABLES SOCIAL INNOVATION

Temasek Foundation Specialists’ Community Action and Leadership Exchange (TF SCALE), is a million dollar programme where the organisation works together with three selected Singapore’s polytechnics - Nanyang, Republic and Singapore Polytechnic.

They have partnered with 10 Technical and Vocational Education and Training (TVET) colleges from across ASEAN to launch this student leadership exchange programme. This programme encourages scholars from different TVET institutions to enhance their holistic learning and cross-cultural sharing experience.

TF is a non-profit philanthropic organisation established by Temasek Holdings in May 2007. This year 150 scholars from Cambodia, Indonesia, Myanmar, Philippines and Thailand, were given opportunities to discuss and apply practical skills to innovate a social project that will help overcome challenges faced in their local community.

The project is split up into two parts: inbound - where the overseas scholars come to Singapore to learn, and outbound - where local scholars travel overseas to help implement the scholars’ social innovation projects.

TF SCALE has been running for two years, inspiring, helping and innovating students across ASEAN. This exchange programme allows students to apply what they have learnt back into their community, to make a difference.

“Getting to experience a brand new culture and meeting so many amazing scholars from the region – it was very culturally enriching and fascinating to see how different people live their life,” said Kane Raynard Goh, 21, a former TF SCALE participant and final year mass communications student.



WARM WELCOME:

The Director of the Office of International Relations from Republic Polytechnic, Dr Terence Chong welcomed the TF Scholars with a mandatory wefie with them.
PHOTO: ISKANDAR ROSSALI

SHARING IS CARING:

Despite cultural differences, Jenda Litna Barus from Indonesia (left) and Kyaw Zin Phyto from Myanmar (right) shared with one another about the lifestyle in their respective countries during a workshop that was conducted by Republic Polytechnic Centre for Enterprise and Communication (CEC).
PHOTO: ISKANDAR ROSSALI



ALL SMILES:

TF Scholars from the different countries interacted with one another, sharing how the objects they brought along with them to Singapore relates to their culture and tradition.
PHOTO: ISKANDAR ROSSALI



JUMPING FOR JOY:

Despite the haze, the students Meas Dany (right) and Koeut Thydalak(left) were more than happy when they got the chance to visit one of Singapore's best tourist attraction, The Marina Barrage. **PHOTO: ISKANDAR ROSSALI**

LEADING THE WAY:

Two students from School of Applied Sciences (SAS), Muhsin and Raden Nur Su'aidah Mahmood, conducted a laboratory class for the Cambodian TF Scholars to enhance their knowledge on the project. **PHOTO: ISKANDAR ROSSALI**



NEW DISCOVERIES:

A tour guide from the Malay Heritage Centre shared a thing or two about the Malay culture back to the TF Scholars who went there for an excursion. **PHOTO: ISKANDAR ROSSALI**

FOSTERING FRIENDSHIP:

Thant Aung Paing (right), a TF Scholar from Myanmar showing the hidden messages that could be found in the dollar note from his country to a pair of TF Scholars from Indonesia. **PHOTO: ISKANDAR ROSSALI**





Humans of Tf Scale
MYANMAR

"Since I was a child, I've wanted to be a doctor to cure children. But when I graduated and wanted to take up medicine, my score was two points shy from getting into the medical course I wanted so I chose Engineering. At first, I wasn't happy at all. I stayed home most of the time; I didn't want to go out. Even if my friends ask me to go out to shop, I would decline because I would be too upset. I cried every night. I was miserable in my first year. My interest and passion for engineering grew as time passed. Now, I'm not at all interested in being in medicine - I just want to be an Engineer!

My dream is to be a professional Mechanical Engineer."

- SANDAR MIYNT, 19, YANGON
TECHNOLOGICAL UNIVERSITY, MYANMAR
BY SARAH PINO

"My wife and I met through social media. Our mutual friend introduced me to her and I was instantly captivated! I added her 5 months before she confirmed my request. The moment I received the notification that she accepted my friend request, I froze in my position! I was just so amazed! I dated her for two years and I knew that she was 'The One'. We fit together perfectly. I married her in January this year. I actually wanted to extend our honeymoon to bring her here, in Singapore, but the pregnancy test showed positive! Alhamdulillah, we got the best wedding present. Fadilla is six months pregnant now and will give birth in January. The ultrasound told me that I'm going to have a son! So this year, I am a husband - next year, I will be a father."

- MR ANANDA, 30, INFORMATION
TECHNOLOGY LECTURER, POLITEKNIK
CALTEX RIAU, INDONESIA
BY SARAH PINO



Humans of Tf Scale
INDONESIA

"My worst memory is almost losing my Dad. My whole family was out playing badminton one day, when all of a sudden, my dad fell on the ground in a seizure due to insufficient oxygen going through his brain. I didn't know what to do at the moment so I stood rooted to the ground and watched painfully. I am thankful to some kind passers-by: they quickly helped my dad by preventing him from losing more blood because he was biting his tongue. They called for an ambulance for us and my dad was sent to the hospital to be treated. Ever since that day, I always think back to that scene - that image - to remind and push myself when I lose motivation.

If I don't study hard now and get a job to support my parents, who will?"

- ALEX LOO ZI YI, 19,
AEROSPACE ENGINEERING,
SCHOOL OF ENGINEERING,
SINGAPORE
BY VERONICA MARIA AND NICOLE KAM



Humans of Tf Scale
SINGAPORE



Humans of Tf Scale
CAMBODIA

"My saddest memory is when my friend died while he was working three months ago. He was my best friend. I called him to invite him over for a celebration but he couldn't come because he lives in a different province. The next day, he died. As a man, I know I shouldn't cry but after hearing the news, I bawled. Yesterday, I talked to him and the next day he was gone. I was so shocked and until today I can't stop thinking about him. You know, his phone number is still in my phone? I always pray for him to rest in peace. He was my brother, not my friend."

- PEL CHEAPANHASITH, 20, ROYAL
UNIVERSITY OF PHNOM PENH, CAMBODIA
BY SARAH PINO

QUOTES

What I learnt...

IN 3 WEEKS



"I am inspired by the PBL method in RP because we must find out about how we can solve problems for the day. I discovered new knowledge about how to care for different religions in Singapore too. Actually, I was wondering how I was going to do my prayers but my friends from RP gave me time and took care that we could do it without trouble,"

VANDI CHAMDIKA, 21



"I saw a lot of special fishes when I visited Qian Hu Farm. I want to build my own farm like what Singapore has in Cambodia. We went to Gardens by the Bay and I had never seen such beautiful flowers! I want to build a pond for farming fish. Also, to create Newater just like how Singapore did. I learnt new experiences and TF Scale is good for Cambodians because we have so much to learn from Singapore,"

DALIU, 21

"I have never been to other countries and this is the first country that I visited. It is different from my country and I have learnt how to travel through trains, buses and simply walking around Singapore. I also learnt that the people here are friendly and kind,"

LOEM SAMNANG, 21



"I want to bring modern technology and transportation system of Singapore to Myanmar. In Myanmar, there's a lot of traffic jams. Buses in Myanmar have a bus captain and a bus attendant. When the bus reaches the location, the bus attendant will make announcement of the location they are at. I want to make the announcement of the location automatic, like it is in Singapore trains,"

MYAT ZIN, 19

"I have gained many invaluable friends and these friends definitely widened my social circle. This cultural integration is definitely an eye opener for me. As a Singaporean, learning more about my country's accomplishment makes me feel more proud of Singapore, I see things from a different perspective,"

DARYL GOH JIN WEI, 19, SCHOOL OF INFOCOMM



"What inspired me would be the Cambodian students. They are really determined to learn more about Singapore and the differences of both countries. During the lab session on biosand filter, they were so motivated to find out more and worked very hard to find good solutions. That's something that impressed me,"

RADEN NUR SU'AIDAH BTE MAHMOOD, SCHOOL OF APPLIED SCIENCE

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