

# Case Study Chulalongkorn University Demonstration School

"The introduction of the Education Support System has improved the relationship between teachers and students and has achieved an environment where students can enjoy learning. Tablet devices have played various roles in classes and have facilitated students' deeper understanding." Urai Vijitara, Associate Director, Satit CU Secondary School



## The customer

Country: Thailand Industry: Education Founded: 1958 Number of students: 2,780 Website: www.satit-e-edu.chula.ac.th (Primary School) www.satitm.chula.ac.th (Secondary School)

#### The challenge

Chulalongkorn University Demonstration School (Satit CU) wanted to introduce tablets to the classroom environment to encourage collaborative learning between teachers and students.

## The solution

Satit CU is participating in the Fujitsu 'Learning Project of Tomorrow' where tablets and education applications are utilized for effective learning. In the project, eight subjects are taught and one learning development activity is also performed.

#### The customer

Chulalongkorn University Demonstration School (Satit CU) in the ASEAN region participated in Fujitsu's 'Learning Project of Tomorrow' that began in September 2014. In February 2015, Satit CU Secondary School initiated a full-scale operation of the Education Support System, which Fujitsu and Fujitsu Systems Business (Thailand) Co., LTD. jointly built. Its introduction has changed the students' attitude toward learning and improved their levels of achievement. Additionally, Satit CU Primary School initiated the same operation of the Education Support System from April 2015.

The Fujitsu 'Learning Project of Tomorrow' provides the equipment and software necessary for ICT classes that are held in ordinary classrooms, to a total of six primary or secondary schools including five Japanese schools and one school in the ASEAN region. Through this project, Fujitsu helps students to acquire 21st century skills and also supports the role of schools suitable for the 21st century.

## The challenge

Satit CU leads cutting-edge education and human resource development in the ASEAN region along with Chulalongkorn University, the top education institution in Thailand. In June 2013 the university and Fujitsu conducted a proof of concept around the student portfolio system and reached an agreement to deploy an Education Support System in Satit CU.

Urai Vijitara, Associate Director at Satit CU Secondary School, comments on the situation when school staff were preparing for the deployment of tablet devices. The school predicted how learning with tablet devices would change their educational prospects: "We believe that two-way communication will improve the relationship between teachers and students and allow students to enjoy learning. When we visited the schools in Japan we noticed that they use the Fujitsu Education Solution, the interactive learning tool between teachers and students. I thought we could adapt this education process for our students."

Urai also explains that the system plays a significant role in the development of education: "I hope that participation in the project leads to the creation of the higher educational environment in Thai schools."

#### The benefit

- Tablets are user-friendly and portable with easy connection to the internet
- Fujitsu's applications on tablet devices allow sharing of information
- Allows students to express their opinions, even the passive students, encouraging confidence and interaction
- Students can study whenever they like while teachers can combine materials and questions for providing effective classes

Urai was concerned about the Education Support System usage as most teachers were not familiar with the technology. Teachers might be worried about preparing teaching materials which are distributed and utilized on students' tablets using Fujitsu software. "This problem was solved by forming a team of veteran teachers specialized in subjects and young teachers who have just graduated and are familiar with the technology, in the same lesson. Fujitsu and the Parent Teacher Association (PTA) offered ICT support teams for teachers in order to make their jobs much easier. I would like to express my appreciation to the PTA, Satit CU teachers, and Fujitsu," says Urai.

#### The solution

Satit CU is participating in the 'Learning Project of Tomorrow' where tablets are utilized for effective learning. In the project, eight subjects are taught and one learning development activity is also performed. It hopes the system will be deployed for educational development thanks to the support from Fujitsu's ICT support team.

The system utilizes Fujitsu ARROWS tablet devices, PC server, Opinion Sharing System, Learning Management System, and Learning Repository. Additionally it localized the Opinion Sharing System and Learning Repository into the Thai language, and also offered the Learning Management System, which is mainly provided for universities in Japan, as the education support tool for elementary and junior-high schools, thereby building a tailored Education Support System for Satit CU.

#### The benefit

Two teachers (in charge of Social Studies and English) explain how the deployment of the education system changed the school's learning environment. Nuttamol Srisuk, in charge of English says: "Tablet devices are easy to carry and can be connected to the internet anywhere. They are user-friendly."

Additionally, Siriphat Chuenka, in charge of Social Studies says: "Tablet devices are suitable for showing maps. Students can learn geographical features through online high-definition maps and also zoom-in/zoom-out maps. Another benefit of tablet devices is allowing sharing of information with friends."

# Products and services

- Fujitsu education solution:
- Opinion Sharing System
- Learning Management System
- Learning Repository
- FUJITSU ARROWS Tablet

Tablet devices are used effectively in each class, but there came the new expectation of "using tablet devices not only in tablet-enabled classrooms but also in every classroom in order for students to utilize content efficiently."

Teacher Nuttamol Srisuk says: "Opinion Sharing System supports students' expression of their opinions. This solution enables us to encourage even the usually passive students to express their opinions in class. Additionally, this change seems to have helped students to train their skills such as understanding teachers' intentions and appropriately expressing their own opinions."

Moreover, in terms of the Learning Management System, teacher Siriphat Chuenka says: "Students can study whenever they like while teachers can combine materials and questions for providing effective classes. Furthermore, Learning Repository has changed how students learn. In the past, students tended to just copy and write down teachers' answers. Now they have learned to compare their answers and find the best answer together. The deployment of the Education Support System has brought about not only collaborative learning and information sharing but also the collaboration between teachers and students. As a result, students not only learn the materials given by teachers in the assigned order but also to take classes more actively."

In order to support the Education Support System of Satit CU comprehensively, Fujitsu and Fujitsu Systems Business (Thailand) Co., LTD. have trained local ICT support staff who give advice on device manipulation, schedule reservation assistance, and system utilization in Thailand, and has also dispatched them to local schools.

Teacher Siriphat says: "We highly appreciate that Fujitsu team members including ICT support staff were engaged in the problem-solving process with us. At the beginning of our system deployment, there were some issues to overcome: e.g. classes did not work well, some students started using devices for playing games because they couldn't understand the learning contents or lost concentration." "Fujitsu's team gave appropriate advice on discipline for students and we tackled these issues together, so teachers could have the opportunity to learn more about teaching methods." Even now, Satit CU and Fujitsu are working together to create a better learning environment.

## Conclusion

When students received the tablet devices for the first time, they were excited and very happy about learning in tablet-enabled classrooms. Teacher Nuttamol says: "In the past, students took classes just sitting in their chairs. Now, however, they can think, analyze, and work as a team. Through this student-centered active learning, students can make friends and learn to be sociable."

"Students have become more interested in taking classes. Some students seem to prepare classes. The available time and space for learning has expanded, so our students can prepare and review classes by themselves. As a result, teachers can put more efforts on narrowing down students' learning gaps with great success," says Teacher Siriphat. Lastly, Urai expresses her vision on the future of Chulalongkorn University Demonstration Secondary School:

"Our mission is to be a 'pillar of education' or the model of deploying ICT innovation in education. In the 21st century, it is necessary to change the education system. Although some schools still have budget issues and their Internet access is not stable, great tablets provide a wonderful opportunity for schools in the future. With all of these issues considered, Satit Chula Secondary School, as the school who first participated in 'Learning Project of Tomorrow', are well-prepared for giving advice. We are now arranging for every subject at all levels for the purpose of creating two-way communication and building great relationships between teachers and students and among friends. With these tablets and the software that Fujitsu has deployed for our school, we hope that the Education Support System will change the ASEAN education in the future." Urai Vijitara, Associate Director, Satit CU Secondary School

#### Contact

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