SEEDING TECH AT AN EARLY AGE

Chua Chu Kang Primary School in Singapore is tapping a software-as-a-service offering to marry IT with its new learning model for students.

Having introduced a problem-based learning model to students in late 2006, Chua Chu Kang Primary School decided to further develop this concept by devising a way to integrate technology into the learning process.

Often used in higher education, problem-based learning is increasingly being tapped by schools to engage students in a more involved manner. Learning is driven by open-ended problems which can help foster self-initiated learning, collaboration, plus develop communication and problem-solving skills.

Mr Francis Foo, the school's principal noted that past experiments with infocomm technology (ICT) had unearthed positive results with students being more engaged in classes.

Earlier this year, SingTel and its partner UniServity approached the school with an idea to create an online platform for a community-based learning environment that builds on the principles of problem-based learning.

"We have seen problem-based learning models adopted in other schools but no one had coded this together with ICT," said Mr Foo.

The appeal of working with SingTel was that the offering would be provided as a hosted service riding on its network which would be charged on a per user basis. This software-as-a-service offering meant the school would not require any upfront hardware or software investment.

Custom teaching

To start this process, a pilot project was put together involving a group of Primary 3 students (8-9 years old). A portal was designed to allow students and staff to log in from any computer and engage in specific learning exercises.

Formal classes would be held in the school's computer lab and involve structured learning via the portal which presented the problems and different stages of the problem solving in a graphical format. Students could share their ideas within the class with teachers giving them freedom to be creative.

Teachers could customise the portal and build classes and resources tailored to a specific learning objective. Each class was able to preset a time for the resources to go live, a very important part of the project as students needed to move sequentially through the four stages of problem-based learning. Learning is also self directed where higher achievers are exposed to more resources far quicker to accelerate their learning journey.

In addition, students can use their unique login IDs to create their own homepage, blogs and engage other students via the portal.

Offline potential

Mr Foo noted that the learning can take place beyond the classroom with access to the portal available at all times.

"Teachers can ask students to begin sessions before the class to start formulating ideas, do research as well as continue discussions and learning after lessons," he said.

He added that the collaborative learning is an interesting development to monitor. The way students can question and learn from one other and work together to solve problems is something teachers can track and report. Staff can also do polls and surveys to determine learning patterns and effectiveness of the classes.

Mr Foo and his colleagues are considering extending the pilot project to Primary 4 students and beyond.

"The students using the portal so far have all exhibited greater interest in subject matter, a higher level of engagement and motivation to learn," said Mr Foo.

He also noted the huge potential in extending the collaboration aspect with schools overseas to facilitate culture exchange and cross-country learning. ■

Mr Francis Foo,
Principal of
Chua Chu Kang Primary School

This article was featured in November 2007 Enterprise Innovation issue.

NEXT GENERATION LEARNING

SingTel and UniServity have come together to offer software-as-a-service (SaaS) for the education industry.

This is a hosted next-generation learning platform that is bundled with connectivity to enhance the learning experience in schools. It aims to foster self-directed learning, collaboration, as well as developing communication and problem-solving skills.

The service provides a channel for teachers to monitor a learner's development and promotes creativity at the same time.

With SaaS, schools need not worry about any upfront hardware or software investments. It is fully managed by skilled experts at SingTel and data is secured against possible data loss, giving users peace of mind over network, maintenance, integration and bandwidth.

Moreover, learners and teachers can share resources and best practices to enhance the learning process and minimise duplication efforts.

If you keen to find out how ICT can be used innovatively in teaching and learning processes, contact your Account Manager and register for a tour of SingTel's education booth at the Business Solution Centre. ■