

# **IDA And Microsoft Add Spark To Education In Singapore Through Innovative IT Adoption In The Classroom**

August 2 2004

---

Imagine if a 2 kg tablet PC is all students need for lessons, instead of having to carry heavy textbooks to and from school everyday. The same tablet PC also helps them communicate with their teacher and gives them access to lesson materials and online resources anytime, anywhere within the school grounds. This has become reality for all Secondary One students at Crescent Girls' School which has become one of the first schools in the world where an entire cohort has individual tablet PCs, enabled with wireless connectivity, containing digitized textbooks that 'come alive' for classes.

The school is taking part in a pilot programme under the Infocomm Development Authority (IDA)- Microsoft Backpack.NET initiative (BackPack.NET), which seeks to transform the way Singapore's students learn in school.

This morning, Acting Minister for Education, Mr. Tharman Shanmugaratnam toured the school to witness students using their tablet PCs both inside and outside the classroom. At the hydroponics lab, students used the specialized Sketchpad and Virtual Classroom applications to digitally draw Crescent Girls' School's hybrid turquoise and yellow orchid which is being cultivated in preparation for the school's 50th anniversary. The applications allowed the students to participate in the lesson outside the class, while in real-time consultation with Mr Arthur Lim, an orchid enthusiast, on how best to graft the

hybrid orchid.

Also at today's event, Microsoft Singapore and the Ministry of Education announced the signing of a \$5 million Memorandum of Understanding (MOU). BackPack.NET and the MOU aim to prepare and enhance the capabilities of the education community through access to new innovative infocomm technologies and training. The MOU will focus on three areas: Student Readiness, Teacher Readiness and School Readiness.

Through BackPack.NET, IDA and Microsoft Singapore hope to drive research, development and testing of the use of innovative infocomm technologies, such as tablet PC-based software applications and services, in education. The initiative also looks to showcase the use of the software in actual classroom settings.

During Mathematics classes, for instance, students use an application known as Fun with Construction to tackle geometry questions. Using the wireless infrastructure and Virtual Classroom application, students and teachers are able to participate in Maths tests and quizzes from different parts of the school, and even from home. Students have greater one-to-one teacher access and, the teachers can also use the application to monitor the students' work and progress at any time, aiding and encouraging them in their studies by instantly inking feedback.

The digital textbooks make subjects such as Science, English and History come alive with multi-media and collaboration applications. They use a natural interface which enables users to highlight, scribble notes, bookmark and annotate. The digital textbooks also link students directly to relevant learning resources on the Internet, thus helping to supplement their knowledge on the subjects they are studying.

Mrs Lee Bee Yann, Principal of Crescent Girls' School said: "Our

teachers and students only just started using the tablet PCs during classes and already they are saying that the lessons are more engaging and fun. The teachers are excited with the availability of innovative tools to take teaching and learning to a new dimension, including learning beyond boundaries of the traditional classroom and empowering students to create knowledge through personalise learning."

## **BackPack.NET and the Developers' Community**

The launch at Crescent Girls' School also marks the realization of the Developers' Community pillar, one of the four BackPack.NET pillars. Key to building the tablet PC-based applications, the local IT companies that form the Developers' Community have worked in close collaboration with IDA and Microsoft to develop education software products and applications based on the tablet PC. The BackPack.NET initiative leverages on the existing IDA Infocomm Local Industry Upgrading Programme (iLIUP) to establish the Developers' Community for the programme.

Speaking at today's launch of BackPack.NET IDA Chief Executive Officer, Mrs. Tan Ching Yee said: "BackPack.NET is a joint project of IDA and Microsoft to bring new and exciting technologies to Singapore schools to enhance the education experience. It has four pillars. The Pilots and Trials pillar was launched in October 2003. Today, we see fruition of the Developers' Community pillar where we help local infocomm companies build capabilities in the development of tablet PC-based applications. Details of the other two pillars will be shared in the next six months."

## **Ministry of Education Partners with Microsoft to Improve IT Integration and Skills in Schools**

A key objective of the MOU signed by Microsoft Singapore and the Ministry of Education in May, is to train 5,000 teachers and 5,000 students in tailored IT programmes. Teachers and students will be taught to use software applications such as Microsoft MovieMaker II, Microsoft Producer and Microsoft PowerPoint. The aim is to encourage them to use these applications for teaching and learning. Training has already started and to date, 500 teachers and 1,000 students have completed the classes.

Commenting on the MOU, MOE's Educational Technology Division, Director Educational Technology, Koh Thiam Seng said: "In Singapore, our teachers and pupils are already familiar with Microsoft products such as PowerPoint and Microsoft Word. The MOU between Microsoft and MOE will provide schools with greater access to the latest Microsoft technologies. This collaboration will be one important way for MOE to develop the readiness of schools, teachers and pupils by leveraging on Microsoft technologies to promote excellence in teaching and learning."

Also part of the MOU, Microsoft is currently piloting another important initiative the Microsoft Learning Gateway at Crescent Girls' School and National Junior College. The Learning Gateway is an internet environment that combines several well-known Microsoft applications with new e-Learning solutions, aiding the holistic goal of Student Readiness, Teacher Readiness and School Readiness in infocomm education technology.

The Microsoft Learning Gateway allows students to do and submit their homework online, to participate in group discussions, and to collaboratively work on group projects from different locations all over the island. Teachers also benefit from the Gateway as they are able to deliver lessons and assessments over the Internet. Applications on the portal help the teachers to mark assignments and assessments, allowing them to devote more time to teaching. Parents, too, have benefited from

the portal because they are able to track their children's progress on a daily basis as all academic results are stored on the portal.

Said Mr. Andy Zupsic, Managing Director for Microsoft Singapore:  
"Through BackPack.NET and our MOU with MOE, Microsoft is providing training, technical consultancy and development assistance to schools, industry participants and our partners."

"We strongly believe in the power of technology as a learning tool for teachers and students and we are very excited to be able to help shape Singapore's education scene, and encourage students and teachers in Singapore to realize their full potential through the use of educational technology," he added.

The Crescent Girls' School pilot was also made possible through the following sponsors: CET Technologies providing system integration services; Intel and Compex Systems providing the wireless infrastructure; Popular e-Learning and publishers Marshall Cavendish, SNP Panpac and Pearson Education converted digital textbooks and provided the textbook viewer; Heuristix Labs and IdealSoft provided the digital inking applications; Fujitsu PC Asia Pacific and AsiaPac Distribution contributed tablet PCs for needy students; and Commerce Online provided consultancy, deployment and customization to implement the Microsoft Learning Gateway.

Citation: IDA And Microsoft Add Spark To Education In Singapore Through Innovative IT Adoption In The Classroom (2004, August 2) retrieved 23 April 2024 from <https://phys.org/news/2004-08-ida-microsoft-singapore-classroom.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.
---