



Jes Tinawin (left) with Dr Chia Swee Ping.

**Below, Jes Tinawin from Inti's School of IT explains the E-campus concept and how ICT is changing the nature of tertiary education...**

**EQ:** What does an 'e-campus' mean in terms of infrastructure, hardware, software and the requirement for fresh approaches to pedagogy

**Jes:** It means giving continuous connectivity, accessibility, and

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quality engagement in core services to students, parents, staff, and partners locally and overseas. The technological dimension covers three specific areas:

- Network Infrastructure, such as the installation of full-layer 3 extreme network switches, widening network pipes with 2Mbps leased lines and installation of high-speed wireless network bridges to connect library, classrooms and hostels with high speed leased lines.
- Hardware infrastructure, such as more PCs with multiple OS platforms, a 1 PC to 2 staff ratio and campus wide installation of network points and wall-mounted LCDs with networked PCs.

• Software infrastructure like deployment of industry-standard off-the-shelf software and development of course materials in electronic form. Our e-campus project has two major components - the E-OFFICE (electronic office) and WEBCOMMS (Web Course Online Materials and Management Systems). The first comes with various utilities like a mailing-list, news groups, newsfeeds, message board, chatting, scheduler/calendar, calculator, file manager, and dynamic web-based email that supports POP3 and IMAP similar to Hotmail. The second (WEBCOMMS) is our webucation platform or e-education programme that provides course registration, course delivery tools, student-staff collaboration tools, lesson and course material tools, assessment and evaluation tools, attendance and reporting tools, exception reporting tools and so on.

For e-education to be successful, approaches to pedagogy need review. Traditional lecturers will become facilitators who need communication tools such as internet, email, chat, forums, audio, and video. One very important skill is typing or keyboarding. I believe that the degree of 'engagement' between the students and lecturers is the key to a successful e-education programme.

**EQ:** How can we combine innovative approaches to teaching with traditional educational values?

**Jes:** In traditional education, lecturers interact directly with students. They prepare their own materials, notes and tests, and are autonomous within the classroom. In e-education programmes, the student controls the pace of learning. Communication is mediated not only by the computer, software, internet providers, but also by a group of individuals that may include the content provider, editors, designers, technicians, media specialist, facilitators, local tutors, teaching assistant and others. Many people collaborate to produce and disseminate quality materials. In e-education, the three key