TECHFOCUS

Classrooms go tech-smart

NAHID AKHTER

AS time progresses, methods of instruction are being metamor phosed and updated continually. The days of 'Spare the Rod and Spoil the Child' are slowly vanishing and newer ways of instilling knowledge are being introduced in schools worldwide. Where only direct instruction and repetition were the chief means of learning, teachers are now using a variety of teaching aids to stimulate the various senses of the students.

Every student has a different learning capacity and each child learns better from a different set of senses. For example, some students learn better from stimulation through sound or rhythm, some through visual stimulation and others through touch.

To reach the most number of students, the teacher needs to create a variety of learning experiences. This can best be made possible through use of technology and multimedia in the classroom.

Today, technology has made it possible to access a sea of information through just a click of a button. The internet has opened vistas for an assortment of educational benefits. Students can use it to research on a given topic, share ideas, directly ask an expert on the topic, discuss it in online forums and finally put together a school project or a multi-media presentation.

The internet has also facilitated collaborative work among peers, whereby, students in a project group can mutually discuss what they want to put into their project and work together from their own individual homes. What's more, schools can use it to keep students and parents updated with the latest school events and PTA meetings, inform about any emergency holidays and even provide immediate results of any examination or test given through their website.

With the help of e-mail, teachers can post lecture notes to absentees or all the students in general, absentees can submit their projects or homework from home, and teachers and parents can use it to keep in touch with one another about their child's performance in class.

Scholastica in Dhaka has used this approach to allow the school to keep in touch with parents at all times. They have started an SMS service that keeps parents informed about important school announcements and provides other emergency notifications. They also maintain a database of email addresses of parents and use it to get in touch with them, even if they are not in

Smart Board

the country. Parents can also communicate with the school through email with their individual queries, complaints or suggestions. This way, parents can remain updated with their child's progress no matter where they are.

Besides the internet, there are numerous multimedia programs designed to meet the special needs of diverse learners. For example, a student learning English as a second language would benefit from a computer program where they could learn

Students using PRS

Interactive Response Systems

Laptop programme of ISD

the language at their own pace. They could spend as much time as needed on the computer, without feeling pressured to keep up with other students in the class. One class may consist of a range of students, each with a different preferred way of learning. One cannot expect all teachers to teach every student in their preferred way and pace, but a computer program or multimedia application may have the capabilities of doing so without taking additional time away from other students. By utilizing such programs, a single teacher can employ many more resources and methods within one classrooms, rather than teaching the

information in one manner to all students. A wide range of such educational software is available for every subject imaginable and teachers can use these effectively for their benefit.

Educators can also use the multitude of software available that are designed primarily for them, such as time-table generators and other class management software that help teachers to record, analyze and summarize attendance and student test scores. Such software save time,
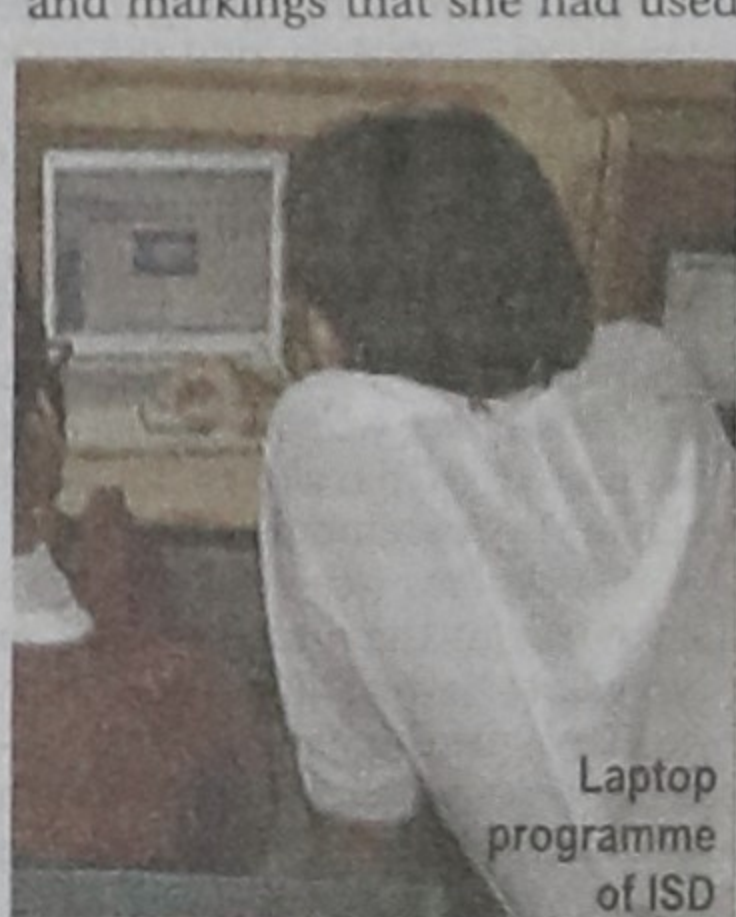
ensure accuracy, make the assessments more objective and fair and allow for flexible and easy changes. There are even software that can transform any text into fun classroom activities, like crosswords, jumbles, flashcards, pair-matching puzzles, and more.

Interactive White Boards are revolutionising the education sector today all over the world, and SMART Technology has pioneered in this revolution with their SMART Boards. The blackboard, chalk and eraser may become obsolete with this new technology that retrieves information, notes and lessons with a simple click. According to the

official website of SMART technology (www.smarttech.com), a SMART Board is "an interactive whiteboard that connects to a computer and draws the power it needs from the computer.

The SMART Board driver automatically starts when the computer is turned on, and the interactive whiteboard becomes active once the driver is running. When (the SMART Board) connects a digital projector to your computer, you can project the computer image onto the SMART Board interactive whiteboard. The SMART Board driver converts contact with the interactive whiteboard into mouse clicks or digital ink. This feature enables you to use your finger as a mouse or write over-top of applications."

With the help of the SMART Board touch screen, teachers can make their lesson more interactive, allowing students to directly interact with the application on the Board. It has also been reported to enhance student concentration and participation in class. Since it is basically connected to a computer, it can do everything that a computer can, including accessing the internet and running multimedia applications. To top that, colored digital pens provided with the Board can be used to highlight, mark or write over. This makes it ideal for teaching maps or diagrams. Moreover, teachers can easily save the notes and markings that she had used

during her lecture and use them for later reference or to distribute them to the students at the end of her lecture.

Unfortunately, due to the high cost, very few educational or training institutions in Bangladesh have been found to use SMART Boards. However, if the cost is weighed against the teaching benefits, SMART Boards may prove to be quite worth it, especially in boosting the institution's reputation.

Interactive Personal Response Systems (PRS) are yet another wonder of technology for modern education. It includes a radio frequency (RF) remote for each student in the class, a central

receiver, whiteboarding software and assessment software, which tally student responses, record attendance, post test results and provide individual feedback. In this way, the PRS systems provide a direct wireless connection between the teacher and students.

With it, the teacher displays or speaks prepared or ad hoc questions, students anonymously key in answers with their remote, and responses are tallied, then displayed on a projection screen or interactive whiteboard immediately.

The advantages of this system are manifold. It allows frequent questioning and feedback, which engages students more actively in the material being studied. This data can then be used to provide relevant in-class feedback, and to adjust instruction according to identified needs. Moreover, Students send their responses privately, so they are free to answer without feeling judged by peers.

The International School Dhaka (ISD) has used of the advantages of integrating technology into education through their Laptop programme. All students of Grades 9-12 are required to have a laptop at school everyday. Student laptops are configured by their IT Department for use with their wireless network so that students can access resources found on the school server and via the Internet during their regular lessons. Of course, such kind of technology becomes a breeding ground for plagiarism, but the school has ensured originality of student submissions by subscribing to *Noodle Tools* and *Turn It In*.

The Noodle Tools software is designed to help students with online research and provides bibliographic citations. The software can be accesses by students from both school and home. *Turnitin.com* helps teachers to detect non-original work and plagiarism. Assignments submitted to Turnitin.com are compared with all other digital documents available on the Internet, including other student submissions.

Sadly, although private schools have started taking the initiative, the public schools of Bangladesh give little importance to technology or the use of computers. The whole world is making a transition into the age of information and if Bangladesh and its citizens do not want to be left behind, every effort should be made to inculcate computer skills among students in the public schools as well.

TECHNEWS

BASIS workshop on IT upgrade project held

IMRUL KAYES CHOWDHURY

BANGLADESH Association of Software & Information Services (BASIS) in collaboration with University of Bermen, Germany and Paris Chamber of Commerce and Industry organised the 'Final Dissemination Workshop on IT-Upgrade Project' at Windy Town of Bangladesh China Friendship Conference Center (BCFCC) on September 13.

The IT-Upgdate Project- "Know-how Transfer and Training in the area of software development and production" is co-financed by European Commission. The aim of the project is to upgrade the knowledge and capabilities of IT professionals for enhancement of quality and process management to meet the expectations and requirements of EU companies for outsourcing.

Under the project, 35 BASIS member companies were selected to participate in the training course. The training was given in three fields 'System Software (which includes Acquisition, Proposal, Contact; Development Process; Quality Assurance and Acceptance; Configuration Management and Delivery, Maintenance and After Sales)', 'Multimedia (which consists of Video Games Product Development Process; Games Designing and Prototyping; Games Technology and Production and Games Programming and Engines)' and 'Clustering'.

The participants of the project were trained by the trainers from Germany, France and BASIS.

At the occasion Feroz Ahmed, secretary, Ministry of Commerce was present as the chief guest. Among others Dr Stefan Frowein, ambassador, Commission of European

Union in Bangladesh, Rolf Reinhard, charge d'affaires, Embassy of the Federal Republic of Germany, Sophie Clavelier-Khan, deputy trade commissioner, Economic Department, Embassy of France attended as special guests. Project Coordinator, 'IT-Upgrade Project' Dr Engineer Bibhuti Roy from University of Bermmer, Germany, Dr Theis Wittig, Representative of the Paris Chamber of Commerce and Industries (CCIP), BASIS Secretary General Nahid Ahmed were also present.

While speaking at the event

Dr Theis Wittig speaks at the event

the chief guest said BASIS as the leading IT and ITES providing association, should take more proactive roles in addressing the supply-side constraints particularly relating to human resources development. He also hoped that EU in future will continue to assist BASIS to make significant contribution to the development of Bangladesh's IT professionals and ultimately the expansion and strengthening of IT export. He also said although Bangladesh Government is trying its best to help boost IT sector, but it's the IT sector itself has to play the

pioneer role in boosting the sector.

Dr Stefan Frowein, ambassador, Commission of European Union in Bangladesh said that EU is delighted to participate in this IT-Upgrade Project. He said EU will help boost Bangladesh's IT in rapidly growing business. He also said EU is committed to help Bangladesh in trade related technical assistance.

"I see huge potential in IT sector in Bangladesh as Bangladeshis are talented and professional," said Dr Engineer Bibhuti Roy.

Dr Theis Wittig suggested that Bangladesh should take up chances, be proactive and should not wait until it comes. Bangladesh should let its potential clients know what it's capable of.

Rolf Reinhard, Sophie Clavelier-Khan and Nahid Ahmed also spoke on the occasion.

BASIS President Habibullah N Karim chaired the session and Project Director, IT-Upgrade Project TIM Nurul Kabir moderated the session.

Certificates were also distributed among the participants of these training programs.

WiMAX in spotlight

MAHDIN MAHBOOB

ZTE Corporation, one of the largest telecommunications enterprise of China, organised a workshop titled 'WiMAX Journey in Bangladesh' at a local hotel in Dhaka recently. The workshop had different sessions including 'ZTE WiMAX Overview', 'WiMAX Business Model and case Study', 'ZTE WiMAX End-to-End solution', 'ZTE WiMAX Network Planning and Optimization Solution' and 'ZTE Engineering Introduction'.

In the event the speakers talked about ZTE's success stories in constructing WiMAX Networks in different countries of the world including USA,

China, Singapore, Libya, Netherlands, Kazakhstan, etc. They also spoke about ZTE's ability to provide end-to-end WiMAX solutions and the many different technological advances it has made since it started Research & Development on WiMAX in 1998.

Today, ZTE boasts over 600 international patents related to WiMAX ranging from standard technologies, product implementations, testing methods to network deployment.
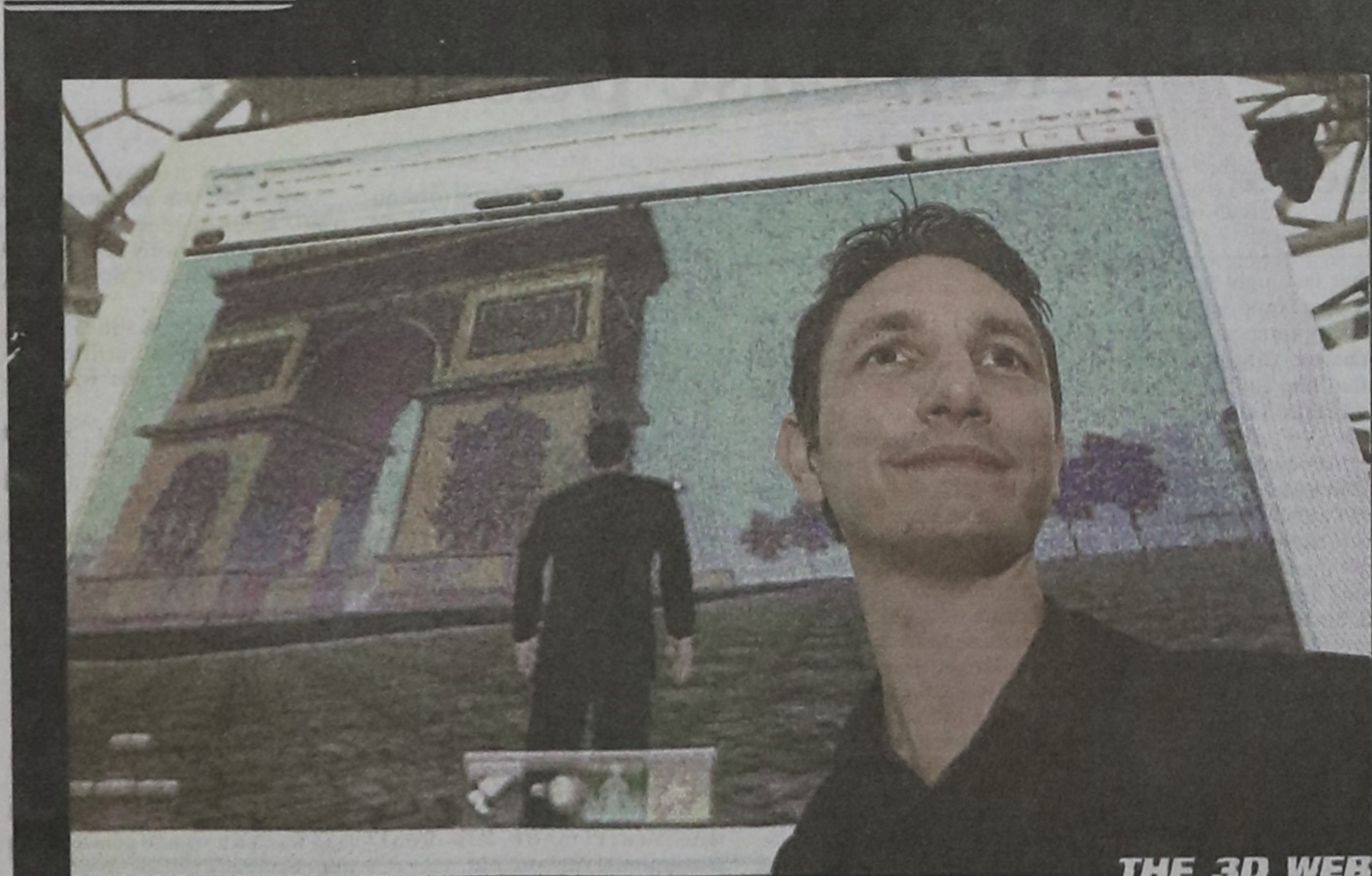
The company has different solution packages according to targeted usage, whether it is a small, medium or large scale office buildings or shopping malls, railway/ subway stations

to single unit houses and apartment complexes. A series of base station types, the Macro, Micro, PICO, and Femto series are deployed according to intended usage.

ZTE Corporation has rich experience in professional training and with advanced training equipment, standard management and excellent trainers, the training network has covered all over the world, providing trainings on systems, maintenance and management for nearly 130,000 customers in over 90 countries.

In the workshop, different management and technical officials from the ZTE China and Bangladesh offices, BTRC officials and other industry people were present.

PHOTO

Founder Danny Stefanic of Melbourne-based ExitReality stands in front of a giant screen as the company launches a free tool it says offers web browsers a world-first opportunity to view the Internet in three dimensions on September 18. ExitReality said its application allowed users to turn any regular website into a 3D virtual environment, where an avatar representing them can walk around and meet other browsers viewing the same website.
PHOTO: AFP

Australian company unveils 3D Internet tool

AFP, Melbourne

An Australian company on Thursday launched a free tool it says offers web browsers a world-first opportunity to view the Internet in three dimensions.

Melbourne-based ExitReality said its application allows users to turn any regular website into a 3D virtual environment, where an avatar representing them can walk around and meet other browsers viewing the same website.

Founder Danny Stefanic said that previously only specialised websites such as Second Life and World of Warcraft allowed users to enter a 3D environment.

"ExitReality goes far beyond that," he said. "It allows you to view not just one website but the entire World Wide Web in 3D."

Browsers can use the tool to turn their social networking pages on sites such as Facebook and MySpace into a virtual apartment, where photographs are displayed on the wall and links to friends are "doors" leading to other apartments.

Users can customise their flats by "decorating" with 3D versions of couches from stores such as Ikea or downloading an e-jukebox to play music clips stored on their personal page.

Similarly, using ExitReality on video-sharing website YouTube creates a virtual cinema, where the browser's avatar sits next to other users also logged on to watch the clip they have selected.

THE 3D WEB

TECHNEWS

Intel rolls out computer chip with six brains

AFP, San Francisco

INTEL on Monday rolled out its first chip with six brains, unveiling a "multi-core" microprocessor that boosts computing muscle while cutting back on electricity use.

The world's leading computer chip maker's new Xeon 7400 series microprocessor is tailored for businesses that want to boost server performance while conserving on space and energy.

Intel executives say the Xeon 7400 is part of an "incremental migration" toward chips with limitless numbers of "cores" that seamlessly and efficiently share

demanding computer processing tasks.

Intel and rival Advanced Micro Devices have two-core and four-core chips on the market.

The six-core chip delivers 50 percent more performance than its quad-core predecessor while using 10 percent less electric power, according to Intel enterprise group vice president Tom Kilroy.

Electricity and cooling expenses can account for nearly half the cost of running company computer servers.

"It isn't just performance and energy efficiency but the use models," Kilroy said of the boon

promised by increasingly powerful chips. "One of the major ones is virtualization."

Multi-core chips are boons to computing trends including high-definition video viewing online; businesses offering services applications on the Internet; and single servers running many "virtual" machines.

"There is a realization that we will be able to bring things to market that weren't feasible four years ago," MySpace vice president of technical operations Richard Buckingham said while discussing the new chip's potential.