Indian kids test electronic notepad
They give ideas to improve I-slate device being developed by NTU and Rice University

By Nirmala Ganapathy

MANJULA S., a primary school pupil in a village in Andhra Pradesh state, is not surrounded by a whole lot of technology in her life. But when the 13-year-old was first introduced to the I-slate recently, she had plenty of ideas on how it could be improved.

The device, a prototype low-cost electronic notepad, is being developed by Singapore's Nanyang Technological University (NTU) and Houston's Rice University for Indian students in rural areas.

Manjula and her 22 classmates in Mohd Hussainpalli village were asked to 'test-drive' the I-slate by a research team from the Institute of Sustainable and Applied Infodynamics (ISAID) at NTU.

'A lot of inputs came from the children about the size of the screen,' said Ms Rajeshwari Pingali, president of ViDAL who was present at the testing of the device.

'They said the stylus is very thin and wanted it to be fatter so that they could hold it properly and then they wanted the cursor to have a feet logo on the screen,' she added. ViDAL is a non-profit organisation that is helping ISAID test the I-slate prototype.

The children, who had never played a video games or used a computer, also wanted changes in the design, including the placement of the buttons on the device and the way images moved on the screen, Ms Pingali said.

Professor Krishna Palem of Rice University, who is behind the idea for the machine, said the aim was to give children without access to computers, a low cost, energy efficient device to help them learn their lessons.

He sees the gadget as a philanthropic effort but hopes it will ultimately retail for as low as US$20 (S$26). I-slate is basically a stripped-down version of an iPad or other similar device with school lessons uploaded on it.

'The idea is to think of the lessons as a video game... what we have been doing is taken an iPad or fancy device and made the content on the device much simpler and it cuts down significantly on electrical power,' said Dr Palem.

In many government schools in rural India, there are few facilities for students. Many schools do not even have chairs or tables, with students seated on mats in front of a large blackboard. According to available data, on average there are only three classrooms per primary school and only three teachers per school.

'The minute we go with a gadget and engage with them, what is happening is that there is a dialogue with the students,' said Ms Pingali.

The gadget has been brought back to Singapore for improvements.

'I understand that the children in India were very excited and they immediately took to the I-slate naturally. We are currently fine-tuning the programme and improving the design based on the children's responses...
so as to improve its effectiveness,' said NTU's president, Dr Su Guaning, in an e-mail response. 'We believe the technology will benefit millions of Indian children who currently attend schools without electricity.'

The device is being built around a new type of low energy consuming microchips, which NTU is developing with Switzerland's Centre for Electronics and Microtechnology.

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SIMPLE iPAD

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