



Mong trying out the smart cane device fitted onto the top fold of the white cane. The device uses ultrasonic waves to detect the presence of obstacles.

Dhananjay Dhanorka putting on a pair of red goggles on his daughter, Arya. The goggles act as a glare reducer. — Photos: SAMUEL ONG/The Star

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## Useful aids for the blind

There are gadgets to make life easier for the visually handicapped.

THE visually impaired use a white cane to assist in mobility and navigation. But now, there is the smart cane device, an electronic travel aid, that they can look forward to. This device is fitted onto the top fold of the white cane and acts as an extension to the cane.

The device uses ultrasonic waves to detect the presence of obstacles. It has an ultrasonic sensor which can transmit and receive ultrasonic waves. The sound waves are not audible to the human ear.

These waves get reflected from obstacles and are detected by the sensors in the device. A warning is issued to the user in the form of vibrations similar to that from a cellphone.

The device was developed by the Indian Institute of Technology in New Delhi, India.

It was one of the devices featured at Knowledge-Technology Sharing Exhibition held at the Malaysian Association for the Blind (MAB) in Brickfields, Kuala Lumpur, recently.

The four-day event featured 25 assistive technology devices from India. The exhibition was organised by MAB's Braille publishing and sales unit and library resource centre in collaboration with Ved Vasudev Pratishtan (VVP), an NGO in India, and Sevai Ashram Foundation Malaysia, a local NGO involved in community welfare work.

VVP India president Ajit K. Tukdeo led a 30-member delegation from India to promote the gadgets. Among the gadgets that captivated the audience were the Ultrasonic Pen Audio Labeller and Talking Menu. When the pen is pointed at a tag next to a dish on the customised Braille-and-text menu, it would read out the name of the dish!

Another device, a Liquid Level Indicator, is clipped onto the brim of a cup. When liquid is poured into the cup and touches the sensors, beeps are sent out to warn the user against overpouring the liquid.

There were also large red and yellow goggles which serve as a



Shaarini is happy as a lark as she tries out a pair of goggles for the visually impaired. — MAJORIE CHIEW/The Star



Volunteer Alshwarya Ambike (right), demonstrating the use of the Ultrasonic Pen Audio Labeller and Talking Menu to Thavasothy. Looking on is Ajit.

glare reducer and light enhancer respectively.

Thavasothy S.M. Pillai, chairman of MBA library, low vision department and Braille publication unit, said: "As part of our ongoing development programme, we need affordable, new and sophisticated equipment which can be used by the blind and the low vision community."

### Bridging the gap

Senator Bathmavathi Krishnan said that in the past, some gadgets were things people read about in journals; even organisations could not afford them, let alone individuals.

"The visually impaired and the blind depend on audio input and voluntary readings by the sighted (for easy access of information). But now, thanks to the advent of technology, the gap narrows between what is available to the

sighted and the visually impaired," said the senator who is a member of the Library Association of Malaysia.

Sumitha Thavanendran, principal of MAB's education and training division, said MAB should organise such exhibitions more frequently to enable the blind to know more about gadgets they can buy from third world countries such as India, as these would be cheaper than those from developed countries.

Wasanthee Sinnasamy, president of Sevai Ashram, said her organisation learnt about these gadgets from VVP and decided to work with MAB to exhibit them in Malaysia as they would be of interest to the visually impaired community.

"Many of the visually impaired were happy with the exhibits and some expressed interest in buying them," she said.

Retiree James Mong, 68, who is

visually impaired, tried out the smart cane device. He was impressed with it.

The smart cane device was marketed in India about two years ago. It is selling for 5,000 rupees (RM335).

Bank receptionist Eugene Hng, 53, who is visually impaired, travelled by bus to MAB after learning about the exhibition from MAB Infoline.

### It's Magic

He tested out Magic Angel, a device that functions as an audio recorder, MP3 player and eBooks reader. "Wonder what magic it can do," quipped Hng as he pushed the buttons on the gadget.

Hng discovered that this gadget from India is similar to a Hong Kong gadget which can play music, record voice and read eBooks.

Economist M. Manokaran, 57,

brought his daughter Shaarini, 25, to the exhibition. Shaarini has nystagmus since birth. (Nystagmus is a condition in which the eyes move rapidly and uncontrollably, resulting in reduced or limited vision.)

Despite her visual impairment, the gutsy lass is determined to overcome challenges, thanks to parental support and her family's love. She is a second-year student pursuing a degree in psychology at a local university.

Manokaran said Shaarini is very much dependent on a CCTV Magnifier to magnify text to make reading easier. The first magnifier broke down after a few years and he bought a second one which she is now using.

"Visual aids like the magnifier are very costly," he said.

At the exhibition, Manokaran expressed interest in a hand-held magnifier which might come in handy for his daughter.