

Surviving deadly rips

MANDY SQUIRES

VIRTUAL technology is teaching people to swim and survive in Australia's treacherous seas, without getting wet.

A new water safety program developed by Swinburne University and Life Saving Victoria, designed to prevent drownings, uses 360-degree, life-like, interactive videos to place kids inside virtual rips and teach them how to "escape" and survive.

It was hoped the technology — applied through head-mounted displays — could also be used to help migrants learn to identify, avoid and survive

Hi-tech swim lesson to help save lives

potentially deadly currents and rips in Aussie oceans, Swinburne researcher Paola Araiza Alba said.

Ms Araiza Alba, from Mexico, said the technology promised to save lives not only in Australia but around the world. People could learn how to handle rips without being put in danger, she said.

"Many migrants know nothing of rips. When I arrived in Australia I, myself, knew nothing about them," she said.

The virtual reality education pro-

gram could also be used by Australians living hundreds of kilometres from the sea, providing them with the skills to spot and get out of rips when they were on beach holidays.

Drowning is among the top five causes of unintentional injury deaths in children under 14 worldwide, with about 1.2 million people around the world — one in five of them children — dying by drowning every year.

And for every child who dies from drowning, another five receive emergency department care for submer-

sion injuries, with most drownings occurring in open water and rip currents often to blame.

A Swinburne study this year of more than 180 10 to 12-year-olds showed use of the virtual reality (VR) technology was very effective in engaging kids in learning about beach safety, and they showed a marked improvement in their knowledge, Ms Araiza Alba said.

"Roughly 80 per cent of drowning incidents can be prevented, and public water-safety education and basic

swimming skills are the key interventions," a Swinburne report stated. "However, access to learning opportunities can be limited by cost and location. Sustainable solutions need to be explored. One such solution is using immersive VR technology to enhance student's water-safety knowledge."

Ms Araiza Alba said the project was funded by the Victorian Government's Public Sector Innovation Fund.

Swinburne researchers are also testing a VR eye-tracking system on pool lifeguards.

mandy.squires@news.com.au