

Students crunch data to improve disability access

Darrell Lim

A team of Nanyang Polytechnic students wanted to make life easier for their friend Toh Wee Yang, a wheelchair user.

Every day, Mr Toh, 18, would have to wait with many other students for the lift. They had to get to different floors for lessons – all within the short time allotted.

That motivated Mr Tan Zhen Wen, 19, Mr Noel Sung, Mr Andre Ang and Mr Ngo Wei An, all 20, to find out how many times students trooped between floors on campus.

Their project won them the third prize in the junior college, polytechnic and Institute of Technical Education category of the National Science Experiment Big Data Challenge Finale on Jan 23.

For the competition, the Year 2 Diploma in Multimedia and Infocomm Technology students collected data from devices worn by their schoolmates and created a program to filter and extract the information they required.

By studying fluctuations in air pressure readings, they estimated that students in the sample group moved upstairs and downstairs 2.9 times a day between lessons.

And, as most students have two or three classes a day, they inferred that the general student population would travel between floors at least once a day.

The team intends to make a recommendation to the polytechnic board to either extend the time be-



DPM Teo Chee Hean with (from left) students Ngo Wei An, Andre Ang, Noel Sung and Tan Zhen Wen, who were third in their category in the National Science Experiment Big Data Challenge. PHOTO: COURTESY OF RYAN LIM

tween lessons, shorten the duration of lessons or designate certain lifts for wheelchair users.

Mr Sung said: “I hope that what we have done will teach (others) a lesson that everyone is able to help other people and (make an impact on) their lives.”

The group that placed first in the team’s category was from Singapore Polytechnic, with its analysis of what made students happy.

NUS High School of Mathematics and Science topped the secondary school category by investigating students’ lifestyle habits.

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EVERYDAY HELPERS

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MR NOEL SUNG, whose team project was inspired by a wheelchair-using friend’s limited access to lifts on campus.