

Transpower Neighbourhood Engineers Awards

Schools from Northland to Otago entered projects for this year's Transpower Neighbourhood Engineers Awards that applied different engineering disciplines to a variety of innovative concepts.

As well as many transport and environmental projects, electronics and software engineering were strongly represented with projects including a house-points scoreboard and a "traffic light" system to monitor classroom noise levels. One of the most imaginative mechanical projects was an automatic push chair rocking device, and the first ever acoustic engineering entry looked at minimising the impact of traffic noise.

Mission Heights Junior College in South Auckland won the Senior Section with "Project Alert", a Raspberry Pi microcomputer-powered device that alerts deaf students when the school's fire alarm has been activated. The team was mentored by product development engineer and Futureintech Ambassador **Brendan Vercoelen** from Fisher & Paykel Healthcare.

Along with learning computer programming and electronics skills, the students have also had an insight into the kinds of high-tech projects developed by engineers. School principal **Joan Middlemiss**, who worked with the team, says: "I have seen students who've never mentioned the concept of engineering now seriously considering engineering as a future career option."

IPENZ Board member **Richard Muggleston MIPENZ** will make a presentation at the school's final assembly in December. The \$3,000 prize also recognizes seven other projects that earned the school a Senior Merit Award.

The Junior Section prize was shared between Christchurch South Intermediate School and Waiuku Primary School for projects that responded imaginatively to real needs in their community.

Mentored by mechanical engineer and Futureintech Ambassador **Nick Yannakis GIPENZ** from Powell Fenwick,



Students from Mission Heights Junior College programming their alert device for "Project Alert", with help from Futureintech Ambassador Brendan Vercoelen.

the Christchurch students developed a user-friendly and lockable scooter storage system. Scooters are now the preferred mode of transport for many students, but secure storage is a headache for many schools. Christchurch South Intermediate is now manufacturing the racks and selling them to other schools in the Canterbury region. **Andrew Read FIPENZ** and **Adam Henderson GIPENZ** from Transpower will present the school with their \$1,500 prize later this month.

Waiuku Primary School also hopes to use their "junk yard" mini-golf course as a fundraiser. Once built, the course will be a community facility with entry fees going to the school. Their mentor was mechanical engineer and Futureintech Ambassador **Georgina Taylor** from Beca, who also worked with them last year on their winning buoyancy aid project. Waiuku Primary is only the second school to win the Awards two years running, and will be presented with their prize by **Dr Ron McDowall FIPENZ**.

To read more about the winning and Merit Award projects, visit www.nea.org.nz