

Tomorrow's Workforce Award Winner: The Mind Lab by Unitec



Video Link <https://vimeo.com/178545430/1c1403f601>

The Mind Lab by Unitec is taking a multi-levelled approach to helping New Zealand children to extend their knowledge and learning outcomes through the meaningful use of technology. The Mind Lab first started by teaching school students, and then they offered teacher development opportunities.

Support for children was partly prompted by gender inequity. The Mind Lab was concerned that by the time young females are offered technology or ICT as a subject in our school system, most opted out because it was perceived it as a "highly male-based subject."

The Mind Lab's response was to launch a school programme in 2013, which has now grown to four regional laboratories in Auckland, Gisborne, Wellington and Christchurch, and eight satellite labs run from the premises of schools in areas including Whanganui, Rotorua, Whangarei, Ruatoria, Hawkes Bay, Tauranga, Albany, Manurewa and Papatoetoe.

Each year 40,000 students attend hands-on active workshops. These workshops provide the opportunity for girls to explore technologies such as 3D modelling and 3D printing, coding, visual effects, robotics, and animation at The Mind Lab from a young age develops an early passion for ICT and STEM (science, technology, engineering and mathematics) subjects.

To advocate for teachers, The Mind Lab set up a post-graduate programme to help enhance understanding of leadership, technology, research and applied practice. With the

majority of school teachers being female and older than 50, The Mind Lab set out to ensure this audience was comfortable and confident returning to education to better understand the use of technology. This year 1,400 teachers will study with The Mind Lab.

Many of the students who attend The Mind Lab have specific learning challenges. The small hands-on classes are ideally suited to these students who participate in programmes with reassurance that their limitations are not obstacles. This includes a commitment to subtitles and videos and additional support on the postgraduate programme.

"Children with ADHD, Asperger's, Dyspraxia, Dyslexia and other challenges are regulars at the lab," says Christchurch Centre Director Michael Campbell. "You would not know they had any issues in the group due to the way they are taught. There are also gifted and disengaged children who have thrived."

The diverse teaching experience benefits both children and The Mind Lab staff alike. Dr David Parsons, Postgraduate Educator at The Mind Lab, says that having students with challenges, such as deafness, in the class has taught him to see teaching and learning contexts in a new way.

"It has given me much greater understanding of the links between hearing, language and understanding which again I believe have value in other contexts," he says.

The active use of Te Reo is also encouraged. The number of teachers submitting in Te Reo has increased to five per cent of all submissions and dedicated Māori language assessors have been employed to support this important growth.

Another educator, Coco Kim-Corey, says that working at The Mind Lab has opened up her world to a vast array of unique experiences.

"I have been so lucky to 'work' in an environment where I get to collaborate daily with people with such diverse backgrounds - educators, lawyers, programmers, photographers, designers, film-makers, students, wizards, tech experts, gamers, artists, bikies, innovators and inventors.

"I have learned so much in the last three years, developing not only technical skills in robotics, electronics, engineering, science and 3D but also skills in public speaking, collaboration, classroom/student management, conflict resolution, teaching and learning."

To deliver the programme, flexibility is also required. Recognising that the teacher development programme required staff to work some evenings and weekends, The Mind Lab developed a 'remote first' approach in their workplace that allows staff to work from the best location and time for their specific role and situation.

Working hours for all staff are recognised between 7am - 8pm to allow for staff to miss traffic or to take breaks during the working day to tend to family needs, undertake exercise or work in way that most suits their individual body clocks and situations.

Staff also come together to celebrate as one large group and, as budgets allow, the entire nationwide team are brought together to ensure all staff are well known to each other. There is a very strong social culture that recognises individual successes and challenges and, in times of need, staff are very proactive in supporting or covering for each other as a core aspect of the family like culture that has developed.

Perhaps the words of Gisborne-based educator Carl Altshul best sum up The Mind Lab culture.

"In 20 years of teaching, nothing has been as great a learning experience as working in the melting pot of difference that is The Mind Lab by Unitec, and the people we offer services to," he says.