

NEW ZEALAND

TARANAKI

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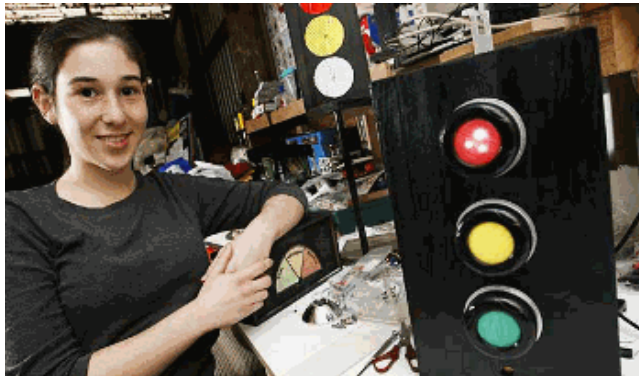
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The Safe Sound Indicator

Taranaki's Jamie Fenton is the 2011 [Young New Zealander of the Year](#)

Kirsty Johnston describes Taranaki teenager **Jamie Fenton** as a young Einstein after the National Foundation for the Deaf decides to commercially produce her classroom noise level meter.

[Full article here](#)

Photo: Chris Hillock

One students innovation to help protect the hearing of thousands of other children...

Imagine how great it would be to have an idea and turn it into reality. At the time, 10 year old Jamie Fenton thought she had achieved the best she could from winning a prize at the local Science Fair.

Now imagine that years later, your idea is recognised and put into production to help 1000's of children around the country.

For Jamie it's a dream come true.

Professor Peter Thorne, Chair of the National Foundation for the Deaf Council, had described Jamie as inspiring a major initiative to use noise level meters in early childcare centres.

"Classrooms can be such noisy places especially at primary school so my first version was more of a behaviour control device. I did not think of noise as damaging back then. It was more of a distraction and I wanted to make something to aid the teachers to control the noise," Jamie explains.

Jamie's invention quickly made headlines around the world...and in newspapers in New Zealand...



Jamie's traffic light indicator as supplied to the NFD and as seen on **TVNZ Close Up**

[view here](#)



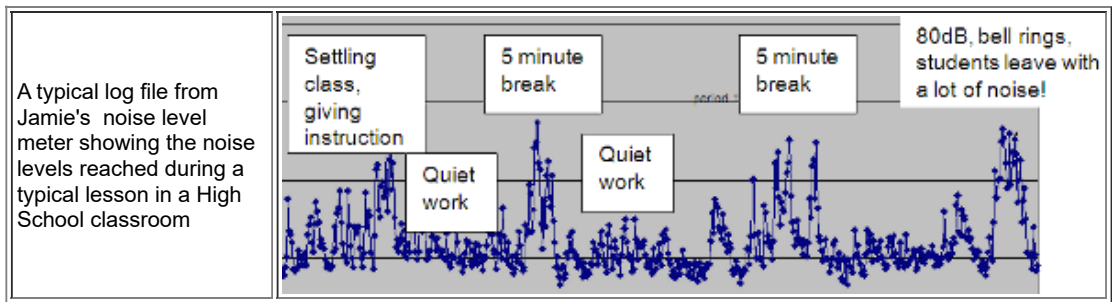
Jamie's indicator is developed by the NFD and sold as the Sound Safe Indicator to early childcare centres

The commercial version of Jamie's noise meter is known as a Safe Sound Indicator (SSI). The device lights up to let children and staff know when noise levels are at a dangerous high. The amber light comes on at 85 decibels, the level where hearing loss becomes a threat.

A National Foundation for the Deaf (NFD) survey of 65 kindergartens, playcentres and Kohanga reo revealed that 20% of children had been affected by a high level of noise, demonstrating behaviours from putting their hands over their ears to being so distressed they cried. Over one third of teachers reported buzzing/ringing in the ears from time to time and hearing loss which they believed could be a result of years working in a noisy environment.



Jamie Fenton designed the traffic light noise meter with a green, yellow and red lighting system that alerts teachers and children to their noise levels so they can take action. ([see this link for the original design](#))



Glendowie Kindergarten head teacher Carolyn Wanden said her kids had tested out the traffic light indicators for a number of the weeks.

"The traffic lights are a really good concept because children can identify with it. Green is okay, red is not."

It is hoped safe sound monitors will be installed in every childcare centre in New Zealand, helping to keep noise to a safe minimum.

Where it all began...

10 year old Jamie at the
[2003 Taranaki Science Fair](#)



The Science Learning Hub explores New Zealand's world-class research, science and technology sectors and provides resources to support fresh thinking in science teaching and learning in our schools.

It features success stories of students as well...age is no barrier to creative thinking!



One student's innovation to help protect the hearing of thousands of other children...



TVNZ Close Up programme 2009 [The Brainy Bunch](#) Donna-Marie Lever



[Monitoring noise at pre-schools](#) Jamie Fenton speaks to Kathryn Ryan



[Dangerous decibels distressing our kindy kids](#) NFD Vibrations newsletter



[Science project measures noise levels](#) fresh thinking explored...

24th September 2009 [Noise level meter sounds like a great idea](#) Taranaki Daily News.

18th September 2009 [Study finds pre-schools dangerously noisy](#) Manawatu Standard. The National Foundation for the Deaf (NFD) is helping Inglewood High School science competition winner Jamie Fenton

develop a prototype noise meter that triggers red, amber and green traffic lights to show teachers and children when to turn the volume down.

3rd May 2010 [Safe Sound Indicators To Help Save Kids' Hearing](#) NFD media release that omits the fact that Jamie Fenton designed the traffic light noise meter with a green, yellow and red lighting system that alerts teachers and children to their noise levels so they can take action. ([see this link for the original design](#)).

2nd June 2010 [Kindergarten gives excessive noise a red-light warning](#) A safe sound indicator prototype has been placed in the centre so teachers and children can see how loud is too loud.

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