



PROGRAM UPDATE 2017



EMPOWERED LEARNING TRUST

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Prepared by Karen Barker, Trust Manager, Empowered Learning Trust November 2017



**2017 NEW ZEALAND
COMMUNITY OF THE YEAR
FINALIST**
NEW ZEALANDER OF THE YEAR AWARDS

REGIONAL WINNER 2014



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Introduction

What is our purpose?

To provide specialised screening programmes that identify children early, that are having difficulties at school. These programmes work alongside services and programmes already offered by schools. This will add value to what schools already offer, and provide additional valuable information about these children that can be used to tailor support and resources within the school and community.

These programmes include:



Screening all year 4 children for Vision and visual perception issues, referring on to appropriate diagnosis, then fitting corrective lenses for no cost to the whanau.



Screening for Auditory Processing Disorder or hearing issues with verified software and referring children on for further testing and referral as necessary.



Screening children for specific learning difficulties then referring on for further diagnosis and support at school. Support and knowledge sharing for family also.

What results do we want to see?

How will we measure these results?

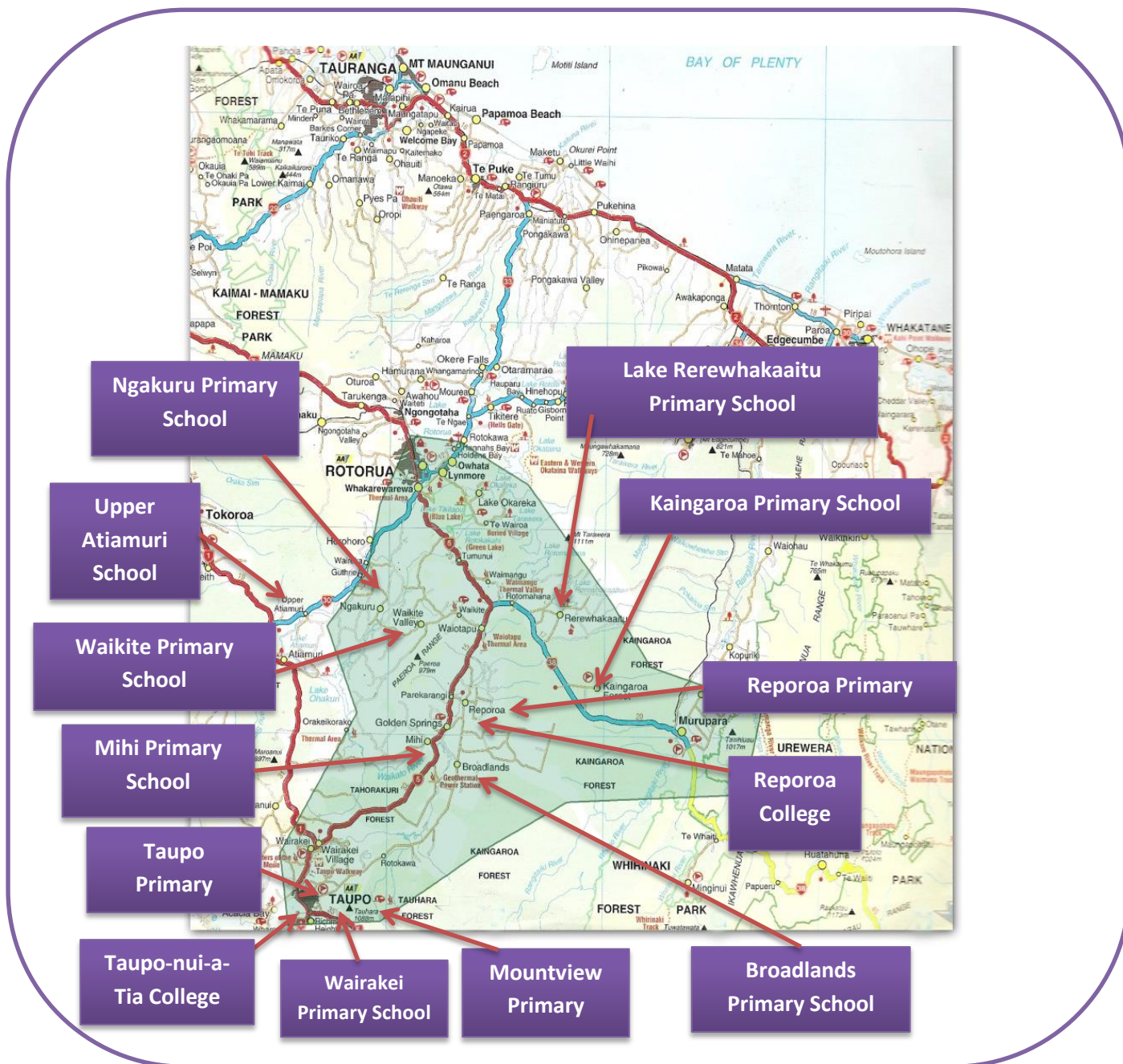
*If young people with learning and processing difficulties are identified early in their educational experience by high calibre staff in a collaborative approach,
And these children are supported throughout their journey with corrective lenses,
specialised programs, or learning support as needed,
Then they will be more likely to have positive educational outcomes,
Remain engaged in their education for longer,
Have better self-esteem and be more employable,
And therefore will be less likely to make poor life choices.*

1. Achievement data - Children are reading at their age, or steadily moving towards this goal as seen in achievement data from schools
2. Children's learning stories - telling us how they feel about their Irlen lenses, along with family and teacher comments
3. Evaluation forms - filled out by teachers or families about the programmes.
4. Audiologist evaluation forms, plus diagnostic retests after APD therapy using the Acoustic Pioneer program to evaluate Hear Builder impact

Who are our partners?

- Reporoa Valley Schools Cluster
- School principals, teachers and SENCOs
- Cluster RTLB
- Health Reporoa
- Irlen New Zealand
- McClellan Visique Optometrists, Rotorua
- Taupo Vision Care
- Specsavers Taupo
- Ngati Tahu-Ngati Whaoa Runanga Trust
- Reporoa Lions Club
- The Auditory Processing Network, Taupo
- local businesses
- National and local charitable funding bodies
- families and caregivers
- The Learning Staircase
- OPSM Taupo

Our School partners



School details

School	Roll	School decile	NZ European	NZ Maori	Other ethnicity
Reporoa Primary	96	4	47 (48%)	46 (47%)	3 (5%)
Waikite Primary	39	10	22 (56%)	17 (44%)	0
Broadlands Primary	100	8	63 (62%)	35 (34%)	2 (2%)
Lake Rerewhakaaitu Primary	94	6	42 (44%)	49 (52%)	3 (4%)
Mihi Primary	51	5	20 (39%)	31 (61%)	0
Upper Atiamuri Primary	27	4	22 (81%)	4 (15%)	1 (4%)
Kaingaroa Primary	19	1	0	18 (99%)	1 (1%)
Reporoa College Year 7-13	254	6	90 (35%)	142 (6%)	23 (8%)
Taupo Primary School	493	5	252 (51%)	192 (39%)	49 (10%)
Mountview Priamry School (year 1-8)	270	3	48 (18%)	203 (75%)	19 (7%)
Wairakei Primary School	284	5	193 (68%)	81 (29%)	10 (3%)
Taupo-nui-a-Tia College Year 9-13	1041	5	619 (59%)	343 (33%)	79 (8%)
Total	2769		1418 (51%)	1161 (42%)	190 (7%)



1. Vision and visual processing screening (Irlen Screening)

Why Is This Important?

Good vision is essential to learning as we use visual cues when learning language and social skills. During a pilot project run by the Rotorua Principal's Association in Rotorua between 2010 and 2012, it was discovered that around 20% of the year 4 children that were screened had a vision issue of some kind that hadn't previously been identified.

How are we doing so far in 2017?

Our Community screeners have visited schools in the Reporoa Valley cluster, Upper Atiamuri, Taupo Primary, Mountview Primary and Wairakei Primary and gave **319 children** an Irlen questionnaire. Those with scores over 10 indicated that needed further screening.

From here **183 children had an in-depth screening with our community screeners** for about 40 minutes.

Of these 183, **147 students were referred on to the optometrist and then Irlen Diagnostician** for further testing.

- At this stage in 2017 there have been **64 children fitted with new lenses** over the entire project, and there are many children still to go on to their appointments : **84 students still to go on.**

Summary Table of screening results as at July 2017

	Total	Lens refits	Total lenses
Total students given questionnaire	310		
Children screened in full	183		
Students referred on	159		
Irlen & Optometric lenses	15	1	
Irlen lenses	39	5	
Optometric lenses	10	0	
Total new lenses fitted	64	6	70
Other Optometric issues	2		
No lenses required	12		
Still to go on	84		

Figure 1: Summary of Irlen screening results at December 2017

The results of **referrals from 2012 to 2016** are shown in the graph in figure 1

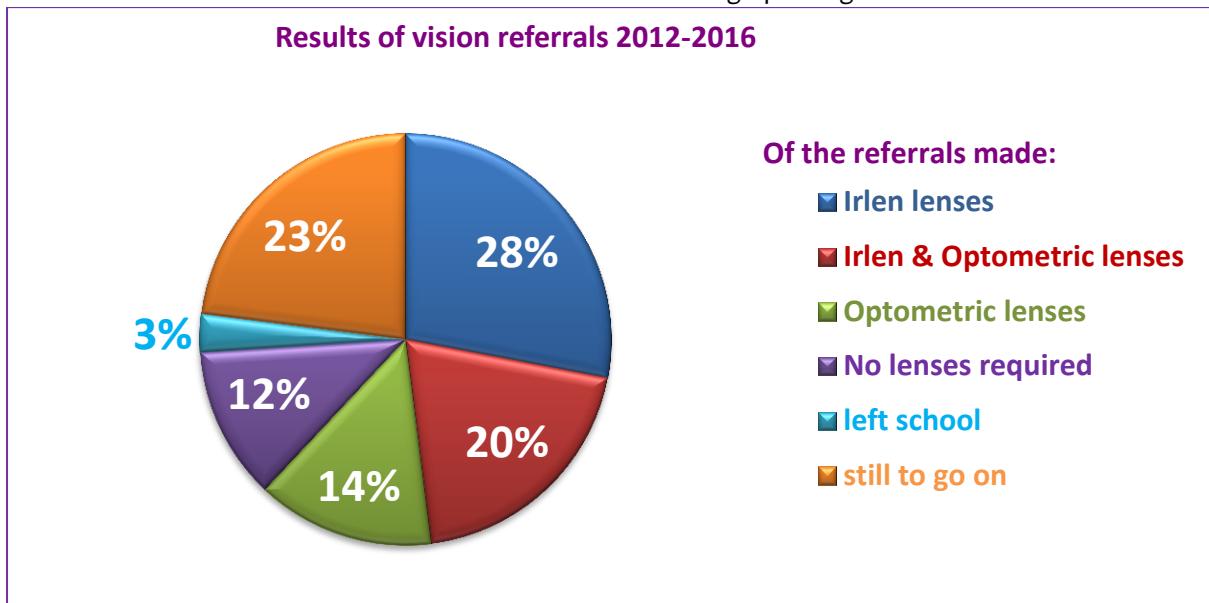


Figure 2: Results of referrals to diagnosticians summary 2012-2016

When we look at the percentage of children fitted with corrective lenses as a proportion of the general groups we screened we see that between 20 – 27% of children in the screened group require corrective lenses of some kind. (see graph in figure 2)

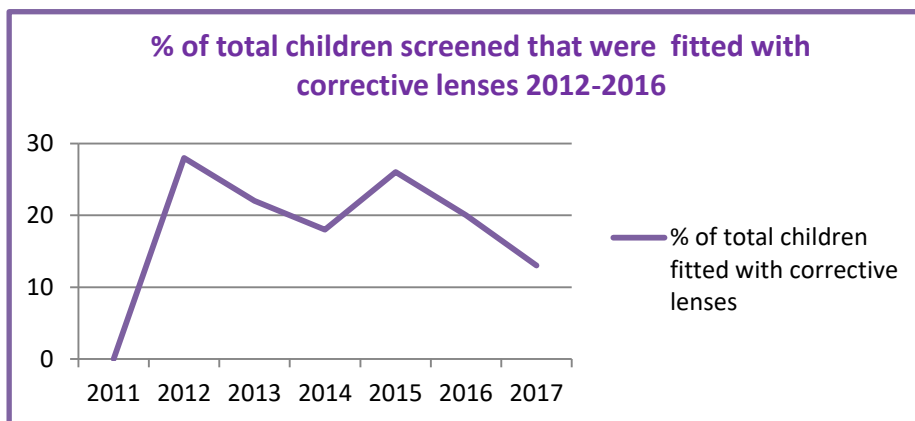


Figure 3: Percentage of total number of children fitted with corrective lenses by year

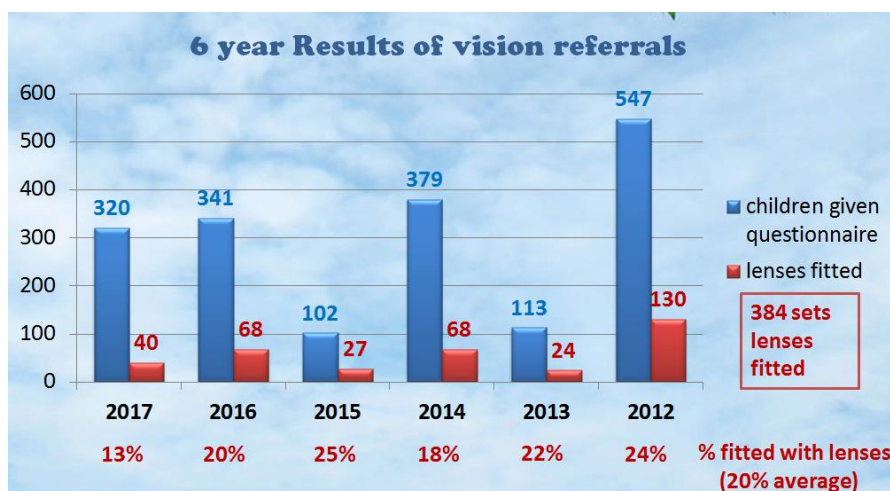


Figure 4: Numbers of corrective lenses fitted over 6 years compared to total number of students screened

The number of students we screen each year varies depending on the schools that wish to be involved with the project. The results for each year are shown in figure 4.

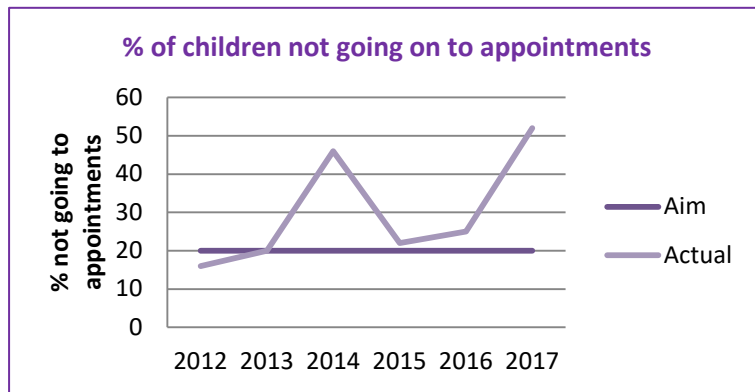


Figure 5: Number of children not going on to referral appointments

Each year there are a number of families that do not take their children on to referral appointments for various reasons. The staff at Empowered Learning work very hard to help support families that may be having difficulty attending appointments by providing transport if possible. There are still many students to go on to appointments this year (99 children), and we are working with the families and schools to facilitate these visits.



What do the kids say about their lenses?

❖ Brandon, Wairakei Primary School, 2017



Brandon was fitted with lenses in August 2017. He has a magenta coloured tint with an optometric correction of +0.5.

Mum says that Brandon's glasses are going "really good." *"We have seen a massive improvement in his schooling and he wears them every day. He has no more headaches and he is excited he can now read without the words moving."*

After his appointment the diagnostician reported: *"Everything looked clearer for him and his mother and grandmother were completely blown away. The benefit is widespread: clarity of text, eye comfort, improved depth perception, clearer TV, ability to see facial expressions."*

❖ Gabrielle, Taupo Primary, 2016



Gabrielle was fitted with her first set of tinted lenses in 2016 as part of a screening project at Taupo Primary School, and was recently re-screened and was fitted with a lighter tint.

Gabrielle's mum noticed that she was having trouble with her reading at school since early on in her schooling. She thought there might be something wrong with her eyes, and went to two different optometrists to get her eyes checked. One said her eyes were fine and the other recommended that Gabrielle carry out behavioural optometric exercises, which she did as prescribed. These didn't seem to make any difference to Gabrielle's comfort and concentration while reading.

One day while she was reading at home, Gabrielle told her mum that “the words were like water and they were running off the side of the page.” Her mum thought this was strange and started to do some research herself. She discovered some information on Irlen and coloured overlays, and purchased some of the overlays to use at home. Gabrielle really liked using the overlays and they helped her fluency and ability to concentrate.

In 2016, Gabrielle was screened with all other year 4,5,6 students at Taupo Primary and referred on for further testing. She was fitted with an Irlen tint. These glasses helped a tremendous amount with her ability to concentrate in class and also with her netball. Her coach said she was so much better when she wore her glasses.

Gabrielle had a tint recheck in 2017 as she felt like her glasses were not helping as much as they had been in the past. Gabrielle also has dyslexia and finds reading and spelling challenging.

Gabby’s mum tells us her story in her words:

“Gabby was having trouble with her reading at school. As number three of four children in a family of keen readers, I noted that Gabby was different to the other kids. It didn’t matter how much reading I did with Gabby and how hard she tried, reading out loud was not something that Gabby enjoyed and she tried all sorts of ways to avoid reading practice. I was aware of the Irlens condition and thought maybe that could be what was affecting Gabby’s reading but it was hard to find anyone who could help diagnose the condition or give advice as to how to help. I got some coloured plastic with a guide lines to overlay over her books, which helped her reading, but this wasn’t supported at school and so the problem continued. It affected her confidence, the way Gabby felt about herself and her enjoyment of school.

After a long journey of visiting eye specialists, behavioural opticians and learning advisors, plus trying to read widely about the reasons why Gabby’s reading was not improving, Empowered Learning helped to diagnose Irlens for Gabby.

The difference was amazing. Gabby loves her glasses and can finally enjoy reading without getting headaches or feeling tired. It broke my heart to listen to Gabby describe what it was like to read to the specialist - saying the words just used to run off the page like water. She had to try so hard just to read, let alone learn. We are so thankful to Empowered Learning and the wonderful group of Mums who did something about helping kids who just need to have the right tools to help them be successful.

Gabby is now onto her second set of Irlens lenses - a lighter version, proving that by wearing the glasses all the time, a difference can be made to the way her brain works. Maybe over time she will not need to wear them at all!”

❖ **Kate, Year 4, Broadlands School, 2012.**



Kate was fitted with Irlen lenses as part of the screening program at Broadlands Primary School in 2012. (see photo on left)

She was recently retested by the Irlen diagnostician in late 2016, and there was no need for her to continue to wear a tint.

After she was initially fitted with her tint, her mum sent us this email:

Wow, what a wonderful few months we have had. We had a daughter who excelled in all sports and maths but who struggled a lot (to say the least) with her reading. Now we have a young girl who no longer refers to herself as dumb and is happy to read and write in front of her peers.

Kate never described to us what she saw on the page when reading and to her, she thought it was normal to see orange flashes of light and the words dancing all over the page. In her words she describes her glasses as “fixing everything” Within an hour of getting her new glasses she was missing in the book section of the Warehouse, not the toy section and when found with a beaming smile she declared “no more rivers in the words mum”. I find writing about this moment a little emotional as we have spent hours trying to encourage Kate to read after school, but either her eyes hurt or she repeatedly lost her place which always resulted in an unpleasant learning experience. Thank you for taking the stress out of learning.

Kate has attended after school learning for some time now and just last week her teacher shook her head and said, “I just can’t get over the improvement in Kate’s reading – it’s unbelievable”.

Kate now often comes home and reads parts of the NZ Herald and tells us what’s been going on. Reading at bedtime has become a pleasure.

We are extremely grateful for the time and care the Empowered Learning Trust took had when dealing with Kate as she is very clever and has managed to fool many people when it comes to her ability to read. Thank you to the sponsors of the Irlen project. With your funding, money was no barrier to helping our child. We do hope the project can continue, and that many more families can enjoy the rewarding experience of a happy and confident learner.

2017 update: Mum’s comments 2017 about Kate & her sister

“Life before Irlen lenses was not easy for our two girls. Our girls were so brilliant in some subjects and so low in reading and writing. As parents, it was heart breaking to watch them struggle. They had difficulty reading print and the words would appear to move and shift making them difficult to recognise. Comprehension was a big issue the girls appeared to focus on trying to read the text

rather than concentrating on the content of their reading. Their reading was very slow, often skipping words or lines and tended to skim the text rather than read it.

Our eldest daughter Kate then 10 years, would comment about how it was really annoying having those orange flashes of light at the side of her page. Kate also saw rivers through her text which she said was one of the reasons she would squirm and change the direction of her head when reading.

For both girls, any reading left them anxious, tired, irritable and sometimes with headaches. Both girls were advised at screening that the lenses would be beneficial in the classroom and they showed little gain from wearing them fulltime.

Kate appears to have gained the most from her lenses. We still remember the day she tried her first tinted overlay, her head popped up from the page with a huge smile and said “there is no orange lights”. I remember looking at her thinking “orange lights, what on earth are you on about?” When we picked her first pair of glasses up she spent ½ an hour in the book isle and The Warehouse and upon returning home she picked up the Herald and began reading the captions. Clearly, she felt very comfortable reading. Everyone who visited got the rundown from Kate on how good her lenses were, doing all these amazing things to her eyes.

Kate has been retested and at screening we were told that now at 14 years old it appears she is gaining little from wearing lenses (which she already informed us). Kate has also been SPELD tested showing results consistent with Dyslexia. She is a very social and talented young lady who excels in sports but takes time process things.

Our girls are lucky that their personalities got them through their school days before they received their Irlen lenses - but others may not be so lucky and could be left behind. Please be happy in the fact that our girls are just a few that have benefited greatly from the assistance they were given and it often makes us smile when we see new lenses being worn at Broadlands School, those children are the lucky ones.



Sara with her glasses, 2016

Many thanks to the Empowered Learning Trust and their sponsors for giving children the confidence to learn.”



Kate, 2017

2. Auditory Processing Disorder Screening

Why is it important?



Once the ears have detected a sound is present, what the nerves and the brain do with that information is what we call auditory processing. Every listening skill we have uses auditory processing. This includes determining where a sound is coming from, following a teacher in a noisy classroom, recognizing your favourite song, picking up on sarcasm; all of these use auditory processing. There are significant correlations to reading and spelling abilities, language understanding and following verbal instructions in the classroom. There are many areas of auditory processing and therefore there will be different impacts depending on which area is affected. Some children have problems with:

- Understanding spoken language unless brief, clear and simple
- Hearing difficulty against background sound
- Slowness in processing spoken information
- Problems with comprehension, reading, spelling, and written language
- Extreme tiredness after school
- Sensitivity in noisy situations

This can result in feelings of frustration, anxiety, withdrawal and low self-esteem. It is our aim to screen for this disorder and to intervene early before too much disruption to learning occurs.

How are we doing so far in 2017?

	Reporoa Cluster	Mountview Primary	Taupo-nui-a-Tia College	Other schools	Totals
Students ears checked by otoscopy and/or Tympanometry	102	29	0	0	131
Ear Health issues/referrals (wax removal, ear infections, other)	5	1	0	0	5
Children screened with APD diagnostic tool	124	54	31	4	213
Hearing test required by audiologist (failed hearing screener test)	47	16	9	1	72
Children requiring APD therapy and support	80	30	17	1	128

Figure 6: Summary of hearing and APD screening results as at November 2017



Children at Broadlands Primary using the Acoustic Pioneer screening program

- **81 students across 4 primary schools are participating in the Hear Builder program that Angela has recommended as beneficial.** This is being carried out at school for 15-20 minutes a day, 2-3 times a week and helps strengthen a child’s auditory processing in the following areas:
 - > Phonological awareness
 - > Sequencing
 - > Following instructions
 - > Auditory memory
- **128 students from this year’s screening will potentially participate in Hear Builder in 2018**
- **Evaluating Hear Builder as a support program** – 12 students at Broadlands School retested after 1 year on the program. Results below:

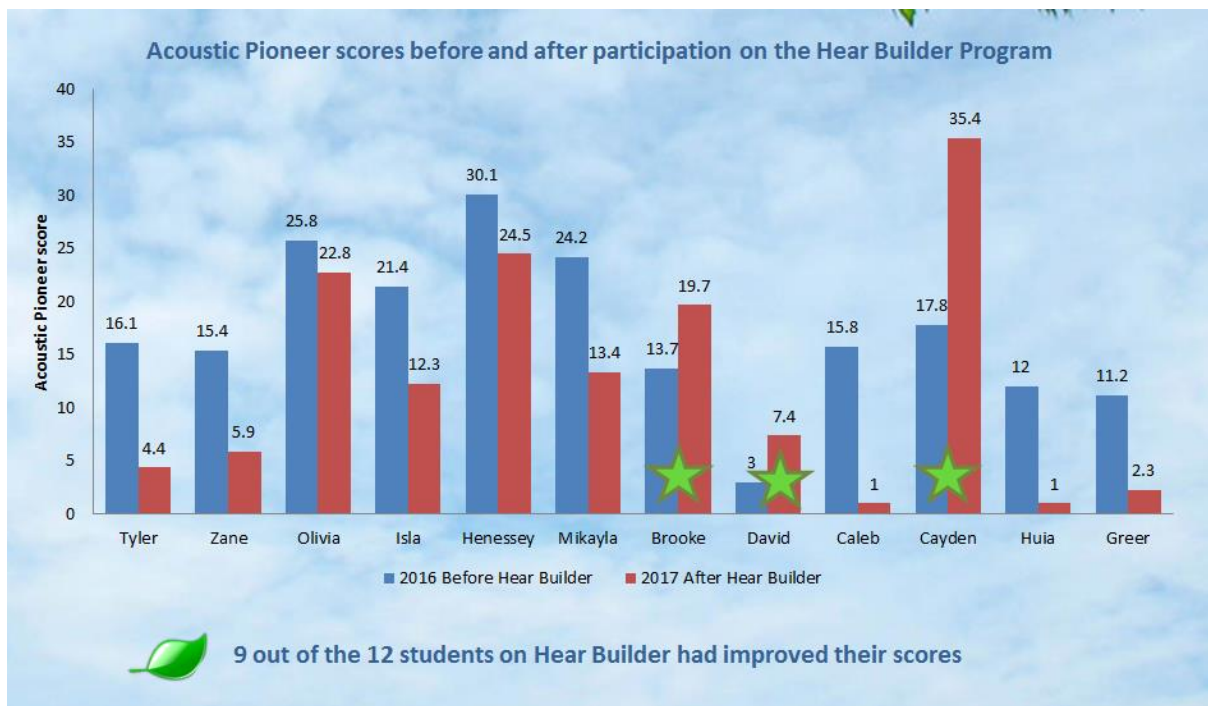


Figure 7: Acoustic Pioneer scores before and after participating in the Hear Builder program. High scores mean more APD issues.

The retesting with Acoustic Pioneer showed that **9 out of the 12 students had shown improvement in their scores**. The 3 children with starts will require further in-depth testing and support from an audiologist and have received referrals. A summary of the extent of the other student's improvement and comments is in figure 8.

Name of student	% improvement after Hear Builder	Comments
Joseph	No improvement	Had an ear infection on the day of testing was not feeling good at all
Tyler	73%	Good progress
Zane	62%	Good progress. Zane has Irlen glasses, and showed signs of a learning difficulty when screened with Lucid.
Olivia	11%	Some progress. Olivia showed signs of a learning difficulty when screened with Lucid.
Isla	43%	Good progress.
Henessey	19%	Some progress. Henessey wears Irlen glasses and has special tuition with Kip McGrath at school
Mikayla	45%	Good progress.
Brooke	No improvement	Brooke will have a referral for a hearing test as she failed the hearing screener.
David	No improvement	Showed poor concentration on the retest day. Has been screened with Lucid and shows a potential learning difficulty.
Caleb	94%	Excellent progress.
Cayden	No improvement	Has had a referral to audiologist for hearing check as he failed the hearing screener. Cayden wears Irlen glasses.
Huia	92%	Excellent progress
Greer	80%	Excellent progress. Greer wears Irlen glasses also.

Figure 8: Evaluation of impact of Hear Builder program on Acoustic Pioneer scores after 1 year participation on the program.

Where to from here?

- Students identified as part of the APD screening program this year will begin to participate in the Hear Builder program at the start of next year. Empowered Learning Trust will purchase the licenses for schools to use
- Several students have been referred for further audiology and in-depth testing.

3. Specific Learning Difficulty screening with Lucid software

Why is it important?

Although New Zealand has a good reputation for the literacy achievement of its students there is a group of students who experience persistent and on-going difficulties in literacy. This group of students have particular needs or Specific Learning Difficulties (SLD) such as Dyslexia that need to be identified so they can be better supported at school and at home. Literacy is the foundation of all learning so identifying dyslexia early is critical. That way, children can be supported to participate in the full range of social, academic and other learning opportunities at school.

How are we doing so far in 2017?

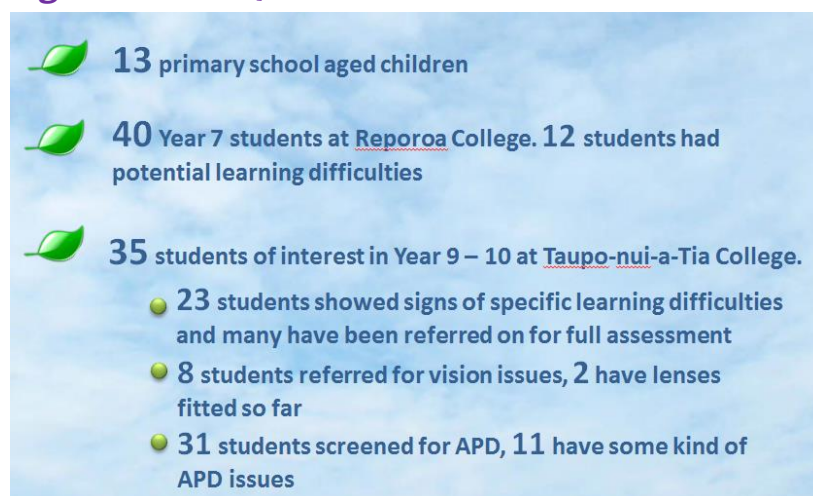


Figure 9: Summary of screening with Lucid software in 2017



One of the students tested at Reporoa College said:

“I am really glad that they are testing me...I hope they find something that can help me.”

Summary of Results of programs from 2012 to 2016

This table summarises the outcomes from our programs since we began screening in 2012. Our range of services has gradually expanded due to the demands of the schools and the needs of the students.

	2017	2016	2015	2014	2013	2012
Vision program	As at 3/11/17					
Children given Irlen/Vision questionnaire	320	341	102	379	113	547
Children screened in-depth by Community Screeners	183	156	81	177	80	220
Children referred on for further testing with optometrist/Irlen Diagnostician	148	130	55	146	40	180
Children fitted with corrective lenses	46 new 4 refits	68 new 4 refits	34 new	68 new 2 refits	24 new 17 refits	152 new
% of total student population fitted with lenses	13%	20%	25%	18%	22%	28%
% of children not attending appointments	66%	25%	17%	34%	20%	16%
APD program						
Children screened for APD and hearing issues	213	168	86	1	-	-
Ear health issues identified	5	22	10	-	-	-
Audiology checks to be done	72	29	12	-	-	-
Children provided with APD support programs	128	85	24	1	-	-
Learning Difficulties						
Students screened for specific learning difficulties	98	81	10	-	-	-
Potential learning difficulties identified	42	32	2	-	-	-
Students provided with full educational assessments	3	6	-	-	-	-

Financial Report

INCOME (end of year 31st March)	2016/17	2015/16	2014/15
	Actual	Actual	Actual
Students screening contacts	360	81	177
Fundraising receipts	1,066	19,119	20,334
Grants and Donations	105,715	26,375	60,385
Total	<u>160,781</u>	<u>45,494</u>	<u>80,719</u>
Receipt items			
Interest, dividends, other	263	969	1,438
Withholding tax refunded	982		
Total Income	<u>108,026</u>	<u>46,463</u>	<u>82,157</u>
EXPENSES			
Public fundraising costs			
Fundraiser lunch			1,481
King of the Ring			512
Volunteer & employee related costs			
Salaries and wages	34,374	23,564	27,569
Staff training	25	984	4,944
ACC	216	276	382
Travel/mileage	3,717		
Provision of goods and services			
Administration and overheads	8,870	4,032	2,124
Accounting and compliance	216	482	190
Database/website costs	190	1,141	-
Irlen NZ tinting costs	13,924	7,828	18,686
Optometrist lenses and frames	13,572	7,775	16,282
Hearing & APD costs	10,273	2,250	328
Educational assessments	1,650		
Repairs to building	2,870		
Other operating costs			
Audit fees	1725	920	863
RWT	0	327	475
Capital payments			
Software purchase of licenses	850	2,172	1,304
Total Expenses	<u>91,570</u>	<u>52,263</u>	<u>74,810</u>
Cash Surplus/(deficit)	<u>16,455</u>	<u>-5,580</u>	<u>7,909</u>

Financial Supporters



Partners



Ross Gordon Optometrist Taupo



VISIQUE

McClelland Optometrists

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TAUPO

BLACKMAN SPARGO
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Iles Casey
Chartered Accountants