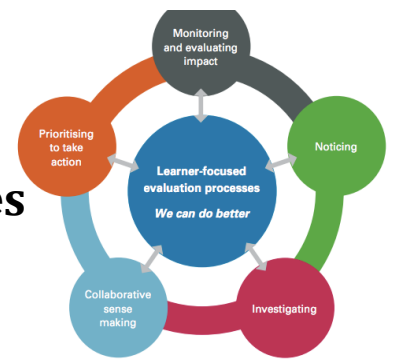


Sabbatical Davis Learning Strategies Inquiry Journey 2018 Jane Severinsen



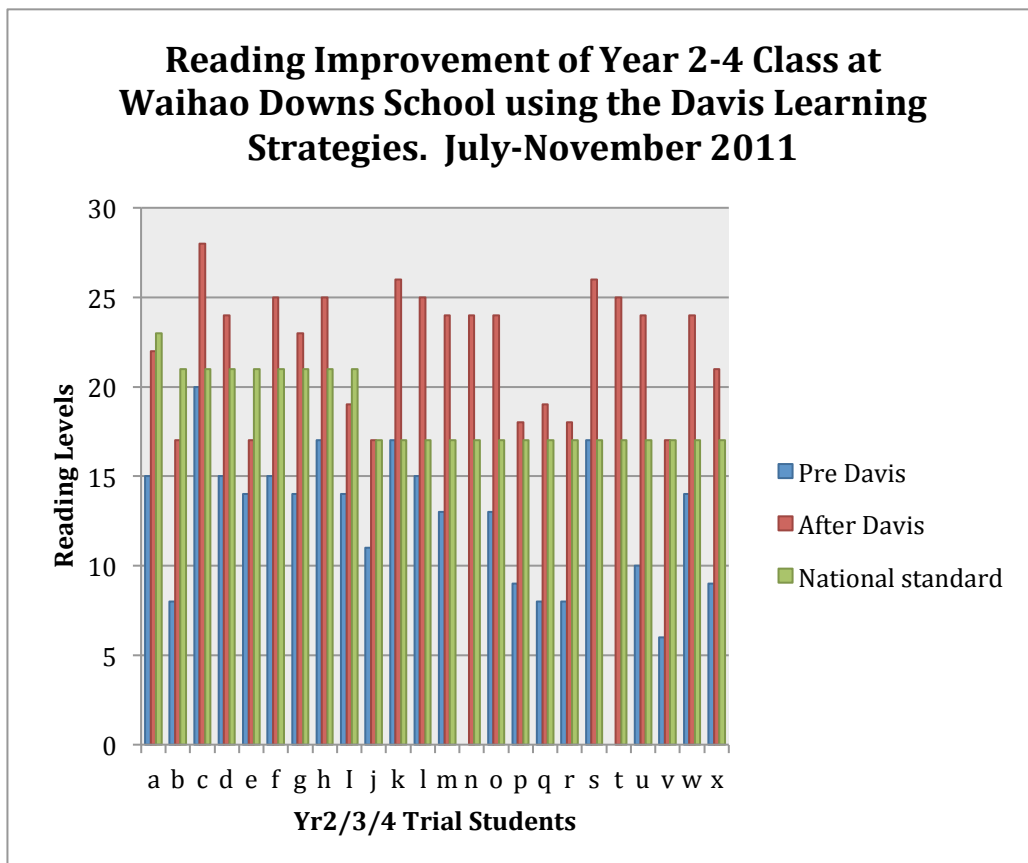
Sabbatical Inquiry Goal: To investigate the impact the Davis Learning Strategies has on NZ schools

1. What impact has the DLS intervention had on the reading achievement of targeted yr2-4 Children who are/were working below curriculum expectations?
2. What impact does the DLS have on the achievement of students identified as MOE priority learners? (Maori, low socio-economic learners and those that teachers have indicated are displaying dyslexic learning traits)

Noticing

Background information

For the last 6 years Waihao Downs School has been using the **Davis Learning Strategies** to empower our students to become life long learners. Initially the DLS were trialed as a program to lift the achievement of our students achieving below the national standard in reading. After a hugely successful 6-month trial period (July –Nov 2011) where 86% (19/22) of children in the trial demonstrated accelerated learning in reading, the Davis Learning Strategies were established across our school.



In 2015 ERO noted the positive impact the DLS had on our children's learning in their report. *"The teachers and parents are strongly focused on learning and improved outcomes for children. They have adopted an effective learning strategy that supports students to actively prepare for learning. This is positively supporting students' increased engagement in their learning.... Students are progressing and achieving highly in reading in relation to the National Standards."* (Waihao Downs School ERO report 2015)

Our 2017 Nag2a data results continue to show that children within our school are achieving highly in both literacy strands and now also in numeracy. This is a reflection of the Davis Learning Strategies being embedded within the culture of our school across all curriculum areas.

Having seen, first hand, the power of the Davis Learning Strategies to:

1. Lift achievement with our targeted below and well below readers.
2. Benefit all learners with specific focusing strategies to focus on learning and deal with the stress, anxiety and confusion that accompany new learning - Ready to learn.
3. Provide the developing brains of our visual, non-verbal thinkers with the tools to make reading an easeful, successful experience.
4. Develop high levels of self-management and student agency (Students are empowered to take ownership of their learning).

It became apparent to me that maybe the Davis Learning Strategies are some of the missing pieces of the puzzle to improve the student outcomes for our at risk students. For the last 2 years I have been working, extramurally, to complete my Davis® Dyslexia Facilitators licensing training from which the Davis Learning Strategies for schools was developed. I also retrained to become a licensed Davis® Learning Strategies Presenter and Davis® Learning Strategies School Mentor.

The next step for me in my own personal development was to use the 'LEARNERS FOCUSED EVALUATION PROCESS' (taken from the ERO publication Effective Internal Evaluation for Improvement publication, 2016,) as a guide for my inquiry investigation regarding the impact DLS has had on reading progress of our MOE priority learners within a New Zealand school context.

My leading question for this Inquiry is:

- What impact has Davis Learning Strategy intervention had on reading achievement of targeted yr 2- 4 children who are/were below National Standards in reading? Specifically focusing on students who are identified as MOE priority learners (Maori, low socio-economic learners and those teachers indicate are displaying dyslexic learning traits).

Investigating

Research findings

It is widely known that many of the world's greatest inventors, architects, engineers and painters are or were dyslexic; Albert Einstein, Thomas Edison, Alexander Graham Bell, Leonardo da Vinci, Walt Disney, General George Patton, Steven Spielberg, Pablo Picasso, Tom Cruise, Richard Branson and of course, New Zealand's own John Britten and Sir Richard Taylor. These dyslexic individuals utilized their dyslexic natural 3D picture thinking ability (right brain thinking) to solve problems, innovate and create. How is it then that, dyslexics who are such creative thinkers, struggle with reading?

Maryanne Wolf, director of the Center for Reading and Language Research at Tufts University, (2014) describes the left-brain activity that happens during reading as a *Reading Circuit*. Wolf shares that the dyslexic reader experiences delays in the process of using the *Reading Circuit* especially when processing letter and words that require connecting the phonemes (small sounds) to their meanings. She suggests that this delay is because dyslexic readers use the right side of their brain for reading rather than the left-brain, thus slowing the reading process down and makes reading less efficient.

Abigail Marshall reinforces Wolf's findings. In her article *Brain Scans Show Dyslexics Read Better with Alternative Strategies*, Marshall explores the latest neuroscience brain imaging research findings on dyslexic readers and makes the following statement regarding traditional reading instruction "*Teaching methods that may work well for a large majority of schoolchildren may be counterproductive when used with dyslexic children. Teaching methods based on intensive or systematic drill in phonemic awareness or phonetic decoding strategies may actually be harmful to dyslexic children.*" (Marshall, 2017).

Marshall goes on to suggest that the Davis Dyslexia Correction® and the Davis Learning Strategies® practice of creating clay models of word meanings and modelling the letters of the word provides our dyslexic readers with a creative, meaning-based strategy that may build mental pathways dyslexic thinkers need for reading success.

Ron Davis in his book, *The Gift of Dyslexia* (Davis & Braun, 2010) provides alternative strategies, for us as educationalists, to enable the dyslexic learner to use their natural 3D picture thinking talent that gives them the skills to successfully perceive the 2 dimensional symbols of letters and words. Thus providing the dyslexic thinker with a powerful way to read with ease. Ron Davis' Dyslexia Correctional Programme® has had proven success in equipping individuals over the age of 9 with the skills needed to master their dyslexia and read with ease. However, The Davis Dyslexia Correctional Programme® requires individuals to have a certain level of cognitive maturity, which often means that our dyslexic learners are in a heap at the metaphorical bottom of the cliff before they are both officially diagnosed and are eligible to access support programmes. Our struggling dyslexics have already experienced 4 years of failure and confusion with their reading and have often developed poor self esteem and negative coping behaviours. Subsequently Ron Davis and educationalist, Sharon Pfeiffer, adapted the Davis Dyslexia Correctional programme® to meet the needs of our early learners (5-8yr olds) and developed the Davis Learning Strategies Programme®.

The Davis Dyslexia Programmes, have been the source of many studies, research articles and academic dissertations;

In 2001 Sharon Pfeiffer et al (2001), under guidance of Dr. T.F McLaughlin of Gonzaga University conducted a 3-year Davis classroom trial in multiple California public schools K-2 grade students. Findings showed that the Davis groups scored significantly higher on tests of sight word recognition and students from within the Davis trial group needed no further intervention or special education. The trial also revealed that gifted and talented referrals were significantly higher in the Davis groups. This clearly indicated that the DLS benefit all children in accelerating their academic progress.

Pfeiffer's longitudinal study findings reflect the results Waihao Downs School are currently experiencing as a direct result of the Davis Learning Strategy® use.

Abigail Marshall, in her article *Evidence Base of Davis Methods* (2018) compiled findings from Independent Research studies run in Italy and South Africa. The Italian researchers compared 8 different dyslexia interventions and discovered that the Davis method was the most efficient intervention for increasing reading speed. South African university researchers concluded that the Davis-based intervention was effective to remediate reading and spelling problems of intermediate level dyslexic learners.

Collaborative Sense Making

At Waihao Downs School the Davis Learning Strategies® have proven to be highly successful in enabling our young visual thinkers to read and write successfully, with all children who have completed the DLS in their first 3 years at school reading at or above curriculum expectations. Teachers at Waihao Downs School have also observed children who use the DLS are also able to self manage effectively. Children are able to focus, become mindful of their own energy (dial) and release tension; they are able to calm themselves in stressful or anxious situations, they are able to get themselves ready for learning. Having students in a calm focused state of mind allows them to be present for learning and allows them to access their brain's frontal cortex where higher thinking occurs. The neuro sequential research of Nathan Mikaeri-Wallis and the Brain wave Trust and B.D. Perry support the above statement.

The following quote from a text message, recently sent to Waihao Downs school, from a student who was part of the initial 2011 trial group clearly states the impact the DLS has had to set our students up to become lifelong learners.

"The Davis tools that helped me the most was doing releases and checking my dial. It helped the most when I was about to do a test or when I was feeling nervous or anxious about something. I still use these tools now at high school so I can really focus and do my best because it helps me put things in perspective. Sometimes I do this without even realizing" (student 2018 – this student who was below national standard in our 2011 school trial took out the Waimate High School top year 8 academic award in 2017).

The positive impact the Davis Learning Strategies have had not only on the academic achievement of both dyslexic and non dyslexic learners at Waihao Downs School over the last 5 years has been noticeable in the following ways

1. Our average NAG2a results from 2013-2017 are:
Yr 4-8 children 92.9% reading at or above National Standard (*note ALL children who have completed the yr 0-3 DLS programme are at or above National Standard*)
Yr 0-8 children 80.8% reading at or above National Standard
2. Since 2013 there has been no Reading Recovery intervention required
3. One RTLB (Resource Teacher of Literacy and Behaviour) referral from 2013-2017
4. Dramatic drop in playground behavior incidences due to students using the Davis Focusing (self management) Strategies
5. Teachers have noticed a drop in student anxiety towards learning

Although Ron Davis' dyslexia programmes has international research to support them, there has been no university studies to investigate the impact of Davis dyslexia or Davis Learning Strategies in the New Zealand context. It is important then to be assured that the DLS meet the principles as outlined in the NZ Curriculum. The Davis Dyslexia theory of putting the learner at the center, using experiential learning opportunities and giving individual learners specific self management 'tools' to allow them to become self regulated and self motivated learners fits seamlessly with the:

- Research findings as outlined in the EOCDs *The Nature of Learning – Using Research to Inspire Practice* (2010).
- NZ Curriculum vision of "Young people who will be confident, connected, actively involved, lifelong learners" (New Zealand Curriculum, 2007:p.7-8)
- Key Competencies – DLS is reflected strongly in the New Zealand Curriculum's Key Competencies of; Thinking, Managing self and Using language symbols and texts (New Zealand Curriculum, 2007:p.12)

Personal research conclusions

Research shows that the Davis Learning Strategies®:

1. Provide our dyslexic thinkers with the skill set to manipulate their picture thinking strength to have success with reading regardless of ethnicity or gender.
2. Empower non-dyslexic thinkers to excel and become self-regulated learners.
3. Affirms Waihao Downs School's decision to integrate the Davis Learning Strategies® into our school-based curriculum.

Part of this inquiry is to discover if the Davis Learning Strategies® are having the same positive impact in other schools across New Zealand

Leading question for this Inquiry is:

- What impact has Davis Learning Strategy® intervention had on reading achievement of targeted yr 2- 4 children who are/were below National Standards in reading? Specifically focusing on students who are identified as MOE priority learners (Maori, low socio-economic learners and those teachers indicate are displaying dyslexic learning traits).

Prioritising to Take Action

To ensure the yr 2-4 students baseline pre data used in this study only involved students who had no prior knowledge of the Davis Learning Strategies®, achievement results from schools initial year of DLS instruction were used.

During July 2018, I visited eight NZ schools (of mixed decile rating, location and size) that introduced the Davis Learning Strategies® during 2017 or in term 1 2018. Data was gathered to investigate the impact that the Davis Learning Strategies had on the reading achievement of targeted children. Student and teacher voice was collected using personal interviews and surveys to measure the impact of the Davis Focusing Strategies® on student learning and class culture.

Schools visited

Te Wainui a Rua

Te Wainui a Rua is a small U1, decile 3 Maori medium kura, situated on the Whanganui River, with a 100% Maori roll. Davis Learning Strategies® were introduced in the senior room (yr4-8) in a holistic approach daily for 6 months from mid – end 2017. The teacher/principal involved stayed meticulously to the script

Castlecliff Primary

Castlecliff is a decile 1 contributing school situated near the mouth of the Whanganui River in Wanganui. Castlecliff. It has a roll of 170 students with 50% identified as Māori. Level 2 te reo Māori is taught.

Castlecliff has been using the Davis Focusing Strategies within the junior syndicate for 3 years, targeted children are withdrawn from a class setting to work 1-1 with teacher aides who use DLS

Onehunga Primary School

Onehunga Primary is a decile 3, yr 1-6 contributing school with a roll of approximately 460 students situated in Auckland. It has a culturally diverse roll with 12% Māori, 40% Pacifica heritage and 30% Pākehā students. The Davis Learning Strategies were trialed by 2 teachers in the yr2 syndicate in the second half of 2017. In 2018 specific time is being set aside for alphabet mastery to be completed with the whole class. Currently teachers are using the Davis Focusing Strategies of release and focus (dial and koosh will be introduced). No Davis Reading Strategies are being included in the current instructional reading programme.

Albury Primary School

Albury School is a decile 6, yr 1-6 contributing rural school in South Canterbury. It has roll of approximately 29 students (2 classes) who are predominantly pākehā or European heritage. Albury School trained 3 staff members in the Davis Learning Strategies at the beginning of 2018 and have introduced the Davis Learning Strategies® throughout the whole school. The staff have stayed true to the content of the Davis Learning Strategies® training. The Davis reading strategies are incorporated into the existing instructional reading programme in the junior room. A trained teacher aide takes “Clay Club” groups for all yr 0-4 students and with targeted yr 5-6 students.

Hinds Primary School

Hinds School is a decile 8 full primary school situated in Mid Canterbury. It has an approximate roll of 152 students with 4% Māori, 5% Pacifica and 19% Pilipino heritage.

12 Teachers and Teacher Aides attended the DLS workshop in January 2018. The school began to use the focusing strategies across all the classrooms yr 1-8. The Davis Symbol mastery (alphabet) was focused in all the yr0-4 classrooms within the first term of 2018. Some teachers are incorporating the Davis Reading Strategies within their classroom programs.

Waimataitai Primary School

Waimataitai School is a decile 7, yr 1-8 full primary in South Canterbury. It has a roll of approximately 435 students, 19% identified as Māori.

In 2017, the yr 0-1 junior teachers trained in the Davis Learning Strategies. The yr 0-1 syndicate use the Davis Focusing Strategies and all yr 0-1 students work through alphabet symbol mastery. Some teachers at times integrate the Davis Reading Strategies into their current instructional reading programme. In 2018, Teacher aides trained and now provide "Clay Club" for yr 1-2 targeted students.

In 2018 the Davis Focusing Strategies were introduced throughout the school.

Kakaramea Primary School

Kakaramea School is decile 6, yr1-6 contributing school situated in South Taranaki. It has a roll of approximately 86 students, 25% identify as Māori.

Kakaramea School uses the Davis Focusing Strategies throughout the school and a teacher aide withdraws targeted children for focused Davis Learning Strategy support. The Davis focusing strategies and symbol word mastery are used within the clay club. The reading strategies are not used. It would be interesting to compare the targeted students reading assessment over the same period of time.

Waihao Downs Primary School *archived data from 2011 -2017

Waihao Downs is a U2, decile 9 rural school situated in South Canterbury. It has a roll of 70 students predominantly pākehā.

Waihao Downs School has embedded the Davis Learning Strategies throughout the school. All classes actively teach and use the Davis Focusing Strategies. In the junior room all students are taken through alphabet mastery and begin word mastery. The Davis Reading Strategies are integrated into the existing guided reading programme throughout the school. A teacher aide runs "Clayclub" for the children who still require support beyond yr 3, or for newly enrolled older students who require remedial support.

Ohakune Primary School * archived data from 2015

Ohakune is a yr 1-8 full primary situated in Central North Island with a roll of 181 students, 42% identify as Māori.

In 2015 Ohakune Primary School worked alongside a Davis Learning Mentor/ Davis Dyslexia Facilitator to run a 6-month trial with a yr 2-3 Class. Davis focusing strategies, symbol mastery and Davis reading strategies were delivered to the class.

Analysis of the results show that 91% (10/11) students who were reading below curriculum expectations at the beginning of term 2, demonstrated accelerated reading progress to meet curriculum expectations within 6 months.

Strath Taieri Primary School – Decile 7 full primary (Otago) * archived data from 2011-2014

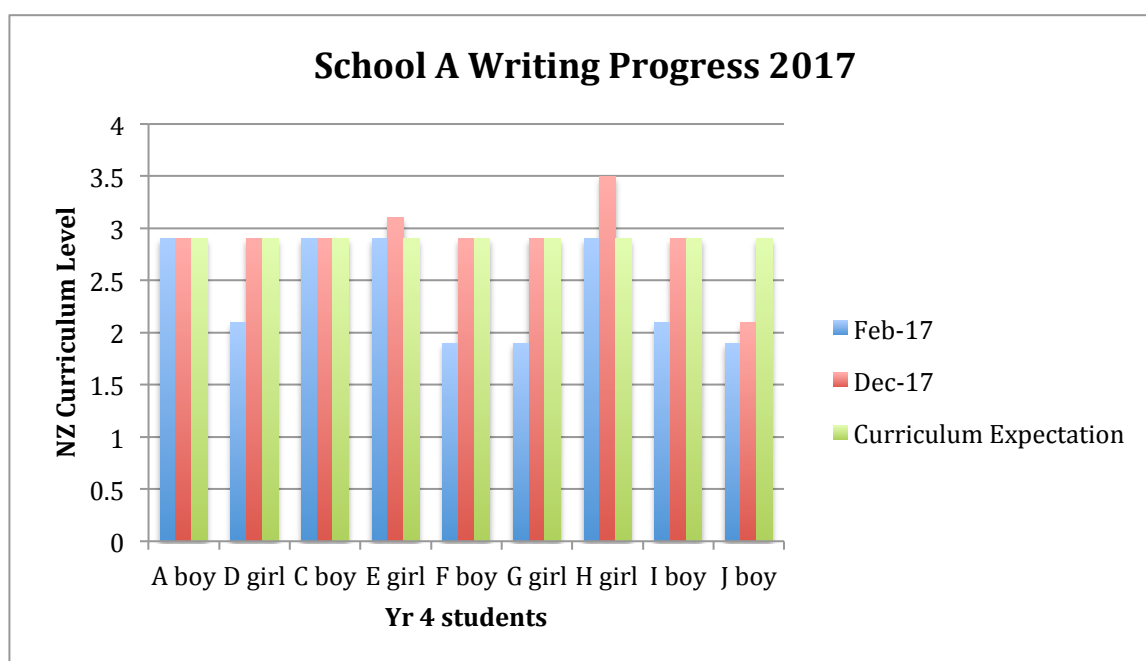
School (A) Collated Data

(Please note that schools reported on in no particular order to ensure confidentiality)

Teacher Voice

"We used the DLS for a good part of 6 months in 2017. We have not had a vast growth in the raising of student achievement in literacy ever in the 6 years I have been the principal at this kura like we did in the period. Tamariki were engaged, motivated and gained great self satisfaction in their learning because of their confidence from learning how the DLS can impact positively on their learning." (Principal, 2018)

Data was collected on the yr 4-8 students. Analysis of the yr 4 data shows that 56% (5/9) students demonstrated accelerated progress in 2017.



Analysis from teacher, student interviews and observations

Benefits of using DLS:

- Children enjoyed the pace, simplicity and hands on content that DLS provided.

Barriers of using DLS:

- Lack of time in a crowded curriculum
- Management of the clay.

School (B) Collated Data

(Please note that schools reported on in no particular order to ensure confidentiality)

Teacher Voice

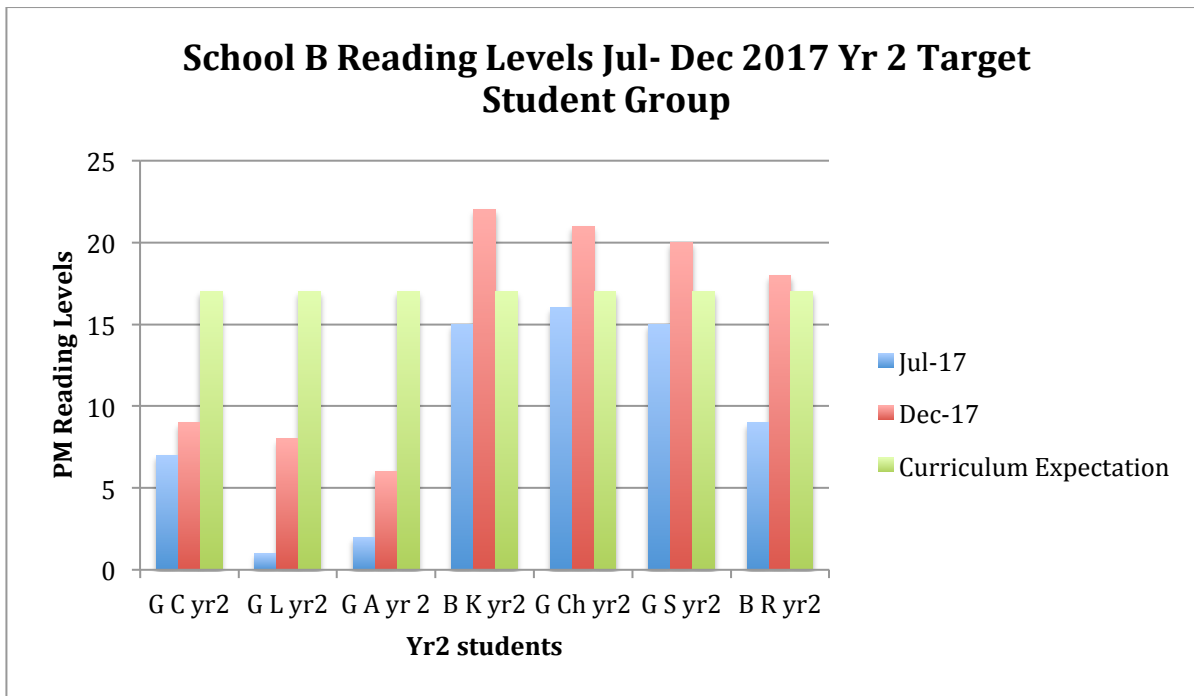
"The students are focussed and enjoy the clay work. I have noticed differences in their focus, attention span, ability to be quiet, fine motor skills. At this point I have not seen great changes in literacy". (Teacher, 2018)

Fine motor skills are developing. Students love doing clay. Last year's target group changed their attitude towards their learning into positive and a desire to learn which they previously didn't have. (Teacher, 2018)

"After starting DLS one of my targeted boys changed from hitting me and throwing items around the room/ demolishing the room, to wanting to learn and write independently. A noticeable change in his attitude, de-escalating from anger to a boy who could manage his reactions and learning." (Teacher, 2018)

Data was collected on the classes targeted yr2 students tracking reading from July – Dec 2017. Analysis of the yr 2 data shows that 57% (4/7) students demonstrated accelerated progress in 6 months to reach expected curriculum levels. The teacher noted that there were high levels of absenteeism from school with the targeted children yet they still made substantial gains academically. Despite the teachers currently using only some of Davis Learning Strategies, students are still showing marked improvement in their reading and self-management skills.

Teachers noticed a positive improvement in the targeted students attitude to learning, confidence to share their knowledge and a willingness to take risks in their learning. One teacher noticed that after 6 weeks of bringing the DLS clay symbol mastery concepts into her classroom that the targeted children were motivated to independently begin class writing sessions without teacher guidance or prompting. Teacher noticed that self-confidence was transferred into reading. It is interesting to note that although the teacher did not actively teach the DLS reading strategies during this 6 month DLS trial yet reading for the targeted students improved greatly.



Analysis from teacher, student interviews and observations

Benefits of using DLS:

- Children are motivated and enjoy the clay work.
- Trialing the DLS within a yr 2/3 syndicate

Barriers of using DLS:

- Not all the focusing strategies are being used
- The programme is only sustained for a year then students move on
- High rates of student absence, lack of home support and overall student motivation

School (C) Collated Data

(Please note that schools reported on in no particular order to ensure confidentiality)

Teacher Voice

"Release and the dial are effective in getting children to self-regulate.

I use release and focus with the class and individuals on needs basis. All children now release before entering the class for each learning session.

The reading strategies of spell and sweep are used with some individual readers. I also find myself releasing at both home and school!" (Teacher, 2018)

Student Voice

I can use release when I am over-excited (Boy B)

I can use release when I am angry with Dan. (Boy G)

I use release when I am scared to say hello to other people. (Boy M)

I can use my release when I am angry and sad and when I am mad too. I can use it when I am loud at fishing. (Girl T)

Release, it's like breathing all the bad stuff out... It's really powerful, it helps me put away the stuff I desperately need to do. My dial gives me thinking time. I put my dial on 5 and it makes classtime

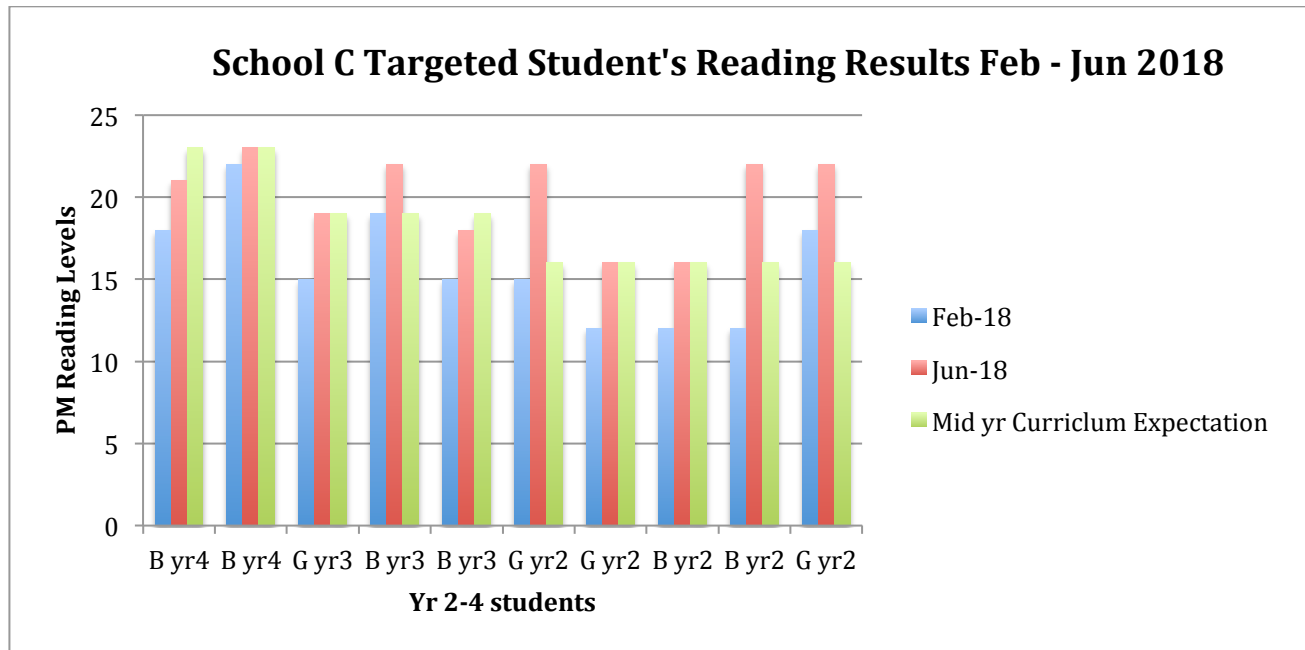
a lot easier, maths is easier, reading,,, when I don't focus and I have my dial on 7 then everything goes wrong. (7yr boy D)

I can release when I'm nervous and angry too. (Boy T)

I can use release when I get into my sleep to help me go to sleep when I am in stress. (Girl G)

Data was collected on the yr 2-4 students. Analysis of this data shows that 60% (6/10) students demonstrated accelerated progress in the first 6 months of 2018.

Both Maori students in this target group demonstrated accelerated learning.



Analysis from teacher, student interviews and observations

Benefits of using DLS:

- Introduced across the whole school, giving shared language and expectations for the children to use the focusing strategies
- Teacher aide to support targeted children outside of the classroom

Barriers of using DLS:

- Difficult for shared teaching senior classroom (routine)

School (D) Collated Data

(Please note that schools reported on in no particular order to ensure confidentiality)

Teacher Voice

"From my past experience with DLS at Strath Taieri as a teacher, DLS did change my practice and deepen my understanding of learners and the range of ways we learn and think. As a Principal of Hinds I am conscious of bringing us back to thinking about the tools and the learner and how we can use the tools to better support our students to be in a focussed state to be able to engage in learning, rather than they are 'just not engaged, can't sit still, home background' comments. (Principal, 2018)

"I am using the tools myself and am a lot more calm in the classroom. I think I have become more creative in looking at how to support children and their learning than in the past. I am

incorporating the focusing strategies into my daily teaching practice with the students.” (Teacher, 2018)

“DLS has given me a better understanding of children with different learning styles, how they learn, and having some practical strategies to use with the children, but more so the children having strategies they can use.

The DLS reading strategies make more confident readers which translates to success for the children and then the effect compounds on itself.” (Teacher, 2018)

“Noticed that the size and neatness of children’s handwriting has improved. (Teacher, 2018)

Student Voice

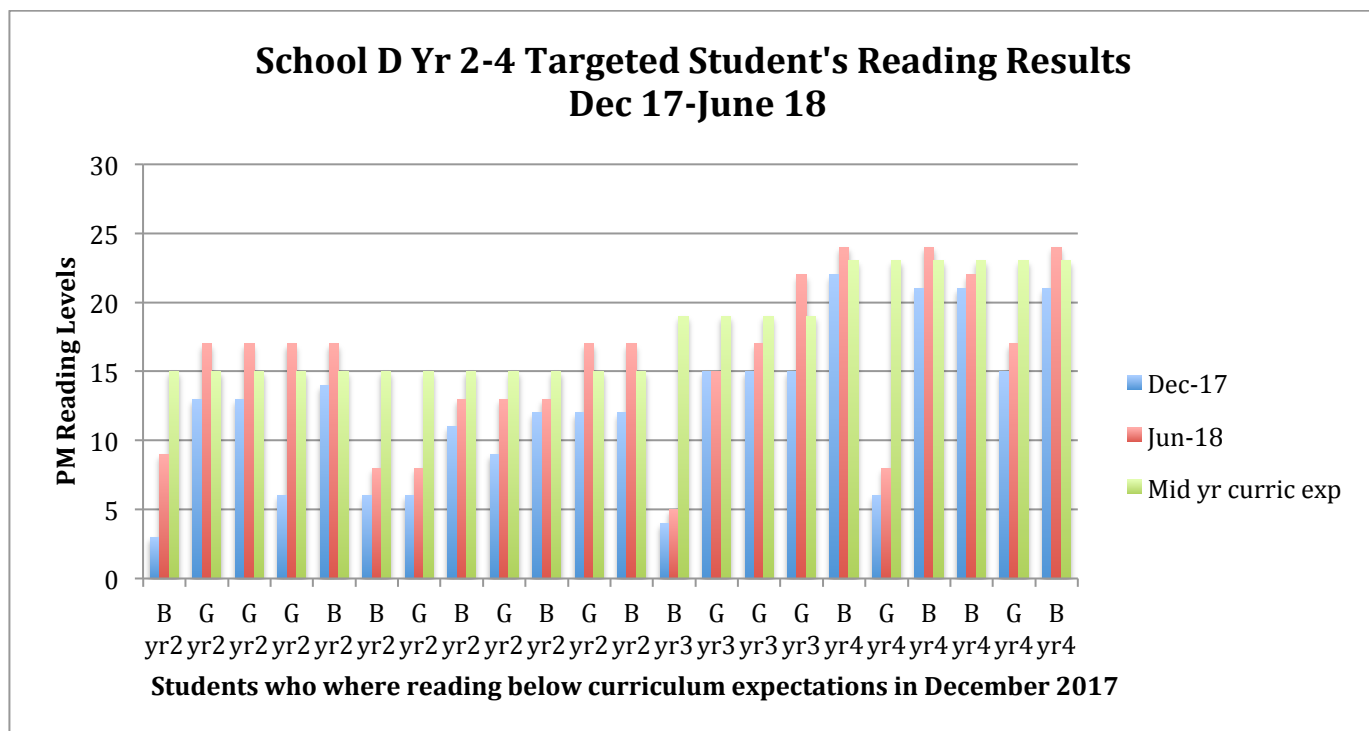
“I do a release cos it gets you calm. I use it when I’m frustrated, when everyone is being loud., they need to check where their dial is and do a release. After you use your dial you feel calm” (yr2 boy)

“I use my dial a lot when I’m stressed with my little brother. When I’m anxious and nervous when Dad does pranks on me... When I’m in the playground I use my dial and release to calm down.” (yr 3 boy)

“I used to get my ds and bs around the wrong way- now I don’t. Focus and release is really good for reading” (yr3 girl A)

The below data analysis records the student improvement after teachers have only included the Davis focusing strategies and alphabet mastery. Teachers have not yet progressed to using the Davis reading strategies across the school.

The graph shows all yr 2-4 students within the school who were reading below curriculum expectations at the end of 2017, the results show that as of June 2018 45% (10/22) have progressed to reading at or above expected curriculum level.



Analysis from teacher, student interviews and observations

Benefits of using DLS

- Dedicated principal who has sourced funding to train all staff and teacher aides
- TA support in the junior syndicates
- Whole school/staff knowledge of the DLS
- Focusing strategies have enabled students to be more relaxed.

Barriers

- Time management around a crowded curriculum
- Larger staff means longer to make a shift in practice
- Difficult for shared teaching classrooms (routine and motivation)

School (E) Collated Data

(Please note that schools reported on in no particular order to ensure confidentiality)

Teacher Voice

"DLS has made me look at how I explain things and also how children perceive different concepts. It has also made me widen my explanation and return to the dictionary for clarification. DLS gives our school a uniformed language that the children all know." (Teacher 2018)

Student Voice

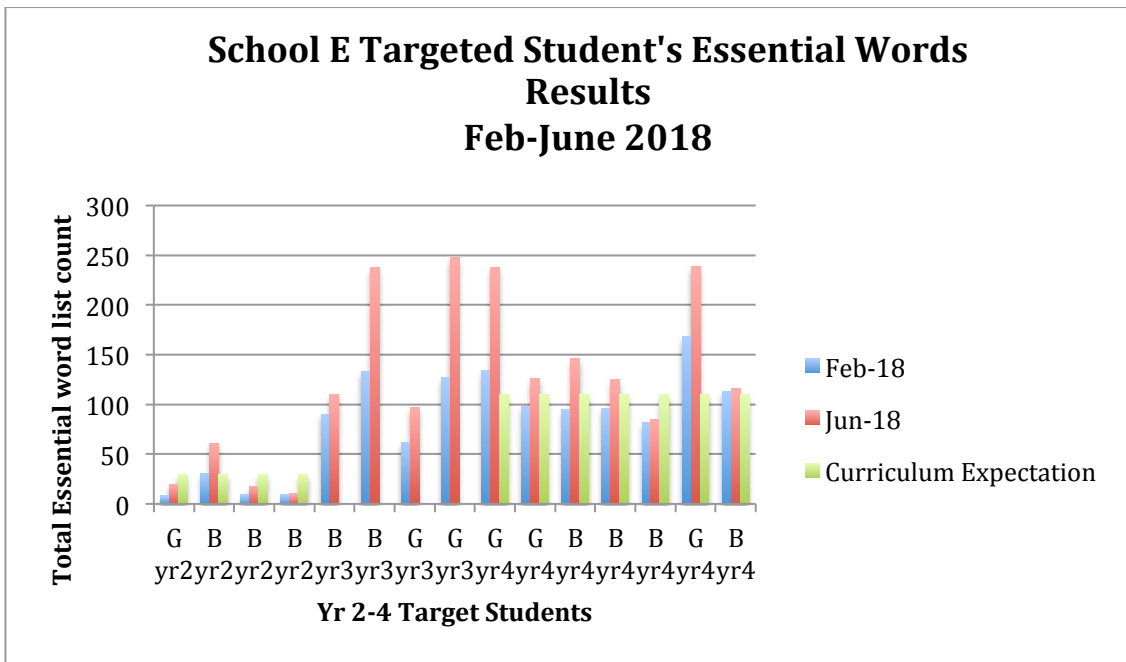
"The Davis helps me picture words in my head" (yr 4 boy T)

"The Davis breaths help when I am sad or angry or afraid. Focus helps me with my spelling and my writing by staying on the lines" (yr 4 girl L)

"Release and focus help me when I am working on my own, I get more done." (yr 3 girl K)

"We do release before we start. If people are chatty, then we do 3 of them and it makes our brains focused and be quiet" (Yr 5 boy B)

School E supplied data on their targeted children that tracked essential word knowledge.



School (F) Collated Data

(Please note that schools reported on in no particular order to ensure confidentiality)

Teacher Voice

"I use the dial and release and focus many times during each day. Very effective..."

Stopping and doing release and focus during guided reading really works to calm and focus the child and enables them to stop stumbling...

Those who use the Davis system sing it's praises...It has proved its worth in our school and I am so pleased to have been trained in it. I will always use it in my teaching and promote it. I am proud that our school has found ways to offer this to children with high needs. I am hopeful that one day the ministry of education will offer more funding for this programme as there are quite a lot of children who fail the Reading Recovery system. I would love to use the whole system properly and really see what results it would have but I do find it difficult in a whole class setting when you team teach or are in a syndicate with others who have not trained or are not as convinced as you about it's worth. I sincerely hope it becomes more widely known and some government funding comes it's way instead of all going to Reading Recovery." (Principal, 2018)

"The Davis Focusing Strategies have positively impacted my classroom management.

We use the breathing and refocus strategies in our class and kura to assist our students in getting ready for a new task." (Teacher, 2018)

"DLS has made me think about the focus students may or may not have. Making the students focus first before learning has been something I have implemented into my teaching after every break and when students become angry or hyped." (Teacher, 2018)

"I think from my first training and the guiding principles of DLS, the holistic approach for our readying the learner, focus, release dial... not isolating the learning difficulty was powerful. Having a greater insight into how our dyslexic visual learners thought, it helped me become so much more aware of how the 3D thinkers make sense of print. The holistic nature of the whole learning impresses me with the DLS." (Teacher aide, 2018)

"With the target child I worked with DLS was like magic." (Teacher aide, 2018)

"Children are less anxious..."

The girl I worked with came to our school at the beginning of last year with a very low reading level. She was 8 last year. Her reading level 8, just over new entrance. I worked with her for 4 terms with 30 minute sessions each morning. Starting with release and focus tools, moving onto koosh ball. She started to use the focus tools in other settings as well. Worked through sessions from alphabet to spell reading then SS reading. When she first started she was disorientated and didn't know what was happening in class. I think she was having problems with co-ordination which I noticed the koosh ball sorted out over a six month period. She also had problems with confusion over numbers. We started with mastering 1-20, then on to counting to 100. By the end of the year she was multiplying and dividing. Her reading level shot up to level 24. She was able to write quicker and of course was much more confident in class. It was a very exciting process. I remember thinking is this working at about the 3rd month? But into the 5th month things really came together and she went from strength to strength." (Teacher aide, 2018)

Student Voice

"I use release, focus and energy dial... it helps me with my learning, I use release and focus in my maths it makes it easy to read the questions. At home I use them, it makes me feel happy when my brother is screaming" (6yrs Maori Girl)

"I use release focus and dial... Helps me because I sometimes yell and get into trouble, so I just release and focus...It makes reading writing and maths easier, I get more things right. Writing is my favourite because I can write stories. When I'm focused I use better words. In reading I get the words correct when I am focused." (6yrs Boy)

Analysis from teacher, student interviews and observations

Benefits of using DLS:

- The focusing strategies give the children specific tools to help them self manage and cope with stressful situations in a decile 1a school setting.
- Teacher aide to support targeted children outside of the classroom

Barriers of using DLS:

- Having some staff not trained in DLS – staff turnover
- Restrictions on the curriculum.

School (G) Collated Data

(Please note that schools reported on in no particular order to ensure confidentiality)

Teacher Voice

"I use the focusing strategies to settle the students when they are frustrated or need to focus." (Teacher, 2018)

"The strategies of release, dial and koosh help to focus the children. I find release is useful in many areas reading, writing and maths and when children are upset/anxious. Many children are using release themselves to calm when upset." (Teacher, 2018)

Analysis from teacher, student interviews and observations

Benefits of using DLS:

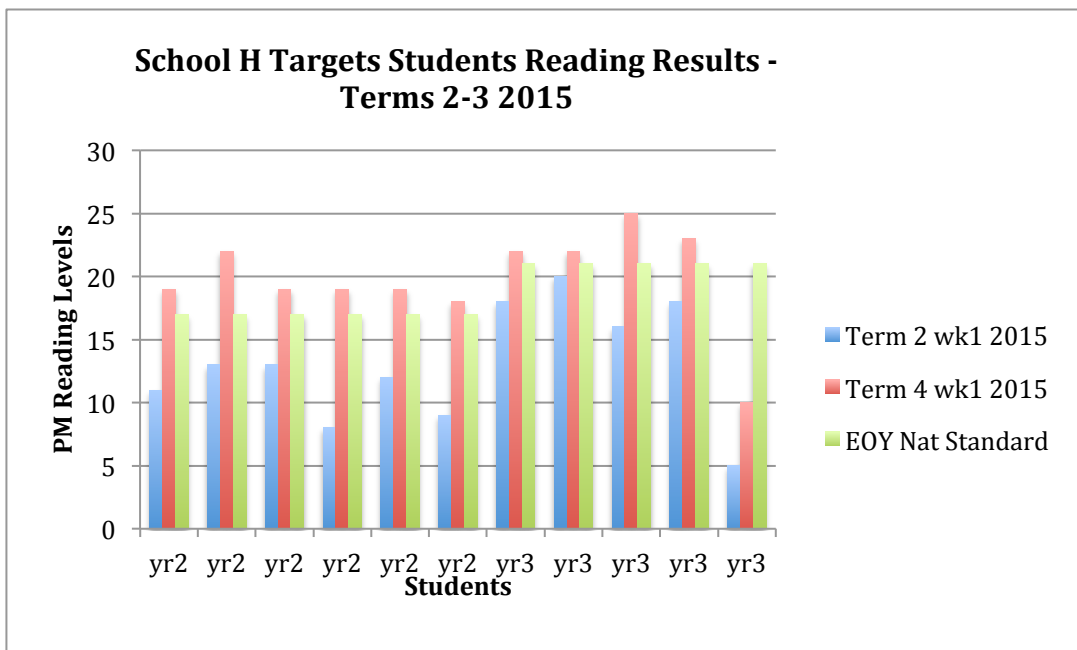
- Focusing strategies have positively impacted student’s ability to focus and reduce anxiety around learning.
- Introduced across the junior syndicate yr 0-1/2, giving shared language and expectations for the children to use the focusing strategies
- Teacher aide to support targeted children outside of the classroom

Barriers of using DLS:

- Large staff (motivation and buy in)
- Roll over of staff requiring DLS training
- Maintaining yr 0-1 teacher motivation in continuation of the alphabet mastery procedures because teachers are not seeing individuals acceleration in reading as students pass into the next syndicate.

School (H) Collated Data

(Please note that schools reported on in no particular order to ensure confidentiality)



School (I) Collated Data

(Please note that schools reported on in no particular order to ensure confidentiality)

Teacher Voice

"DLS allows me to cater for all individuals and allow everyone to succeed. The philosophy of Davis and it's links with brain science is implicated across the curriculum." (Teacher, 2018)

Student/ Parent Voice

"Focus is when you are doing a task and you don't want to get distracted. I use focus for my reading and writing – My dial controls my energy level and actions, I use my dial when my sister is annoying me" (yr 5 girl,)

"When I release it makes my troubles go away... I use my dial to put my energy levels down or up when I am frustrated or tired." (yr 5 boy)

"Sometimes I don't know a word when I am reading, I do a release and get my focus and the word just pops into my head." (Yr 3 boy)

"We had a different child. The pressure of learning had gone, she was given time to do tasks and she was very happy (no more moody child). By doing koosh exercises every day in class and as a class knowing how to "do a release" and check focus and dial when things became overwhelming, she got on track with her learning very quickly." (Parent 2018)

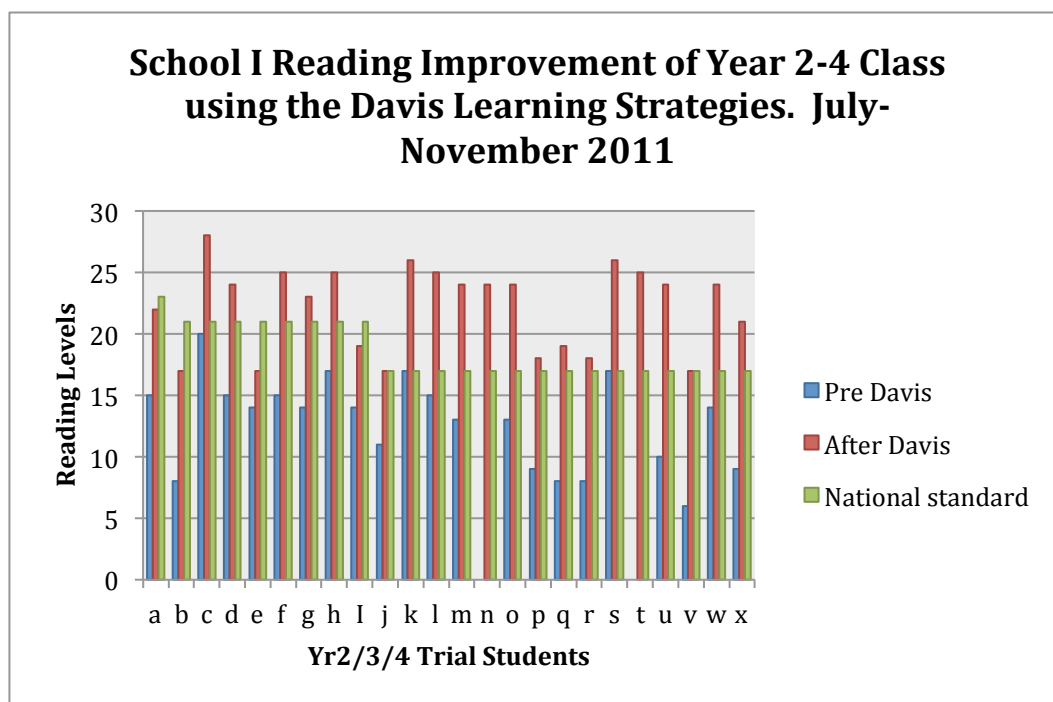
"We didn't realise how behind Z was until he started at (School I) after 2 years at a regular school he still hadn't learnt how to properly form letters. Using the Davis learning techniques after just one term he was improving dramatically and by the end of last year after just three terms he jumped up 2 years in his learning from when he started at (School I), he also won the junior achievement award. All aspects of his schoolwork have improved immensely and he is now proud of his work and doesn't even mind doing homework. Because with the Davis learning programs everyone is taught them he didn't feel like he was the dumb one being picked out to learn on his own, which has upset him in the past." (Parent 2018)

"Having my three sons learning with the Davis Learning Strategies at (School I) gives me reassurance that they are going to be given every opportunity and the tools to succeed. Myself at their age struggled at school with learning difficulties. Being able to access this program for them and making sure that they can overcome any difficulties that I faced and they may face too.

For me, my children coming home and showing me how learning can be fun and easy using the tools that they have learnt using the Davis Learning Strategies to overcome problem and struggles not only with their school work but every day problems and challenges is amazing.

*This is not only what I strive for my own children as a parent, it is what I truly believe for all children as the Board of Trustees chairperson at (School I) to provide quality and equitable education for **all** children. (Parent 2018)*

Data from the school's initial Davis Learning Strategies 6-month trial period (July –Nov 2011) showed 86% (19/22) of children in the trial demonstrated accelerated learning in reading.



Analysis from teacher, student interviews and observations

Benefits of using DLS:

- Enables all children to self regulate and get ready for learning
- Excellent classroom management tool.
- DLS has lifted the achievement of students
- Gives a shared language for teachers, students and parents.
- Allows our dyslexic thinker to have success with reading.

Barriers of using DLS:

- Managing the remedial DLS support for newly enrolled older students puts a pressure on small school resources.

Davis Learning Strategies Over Time

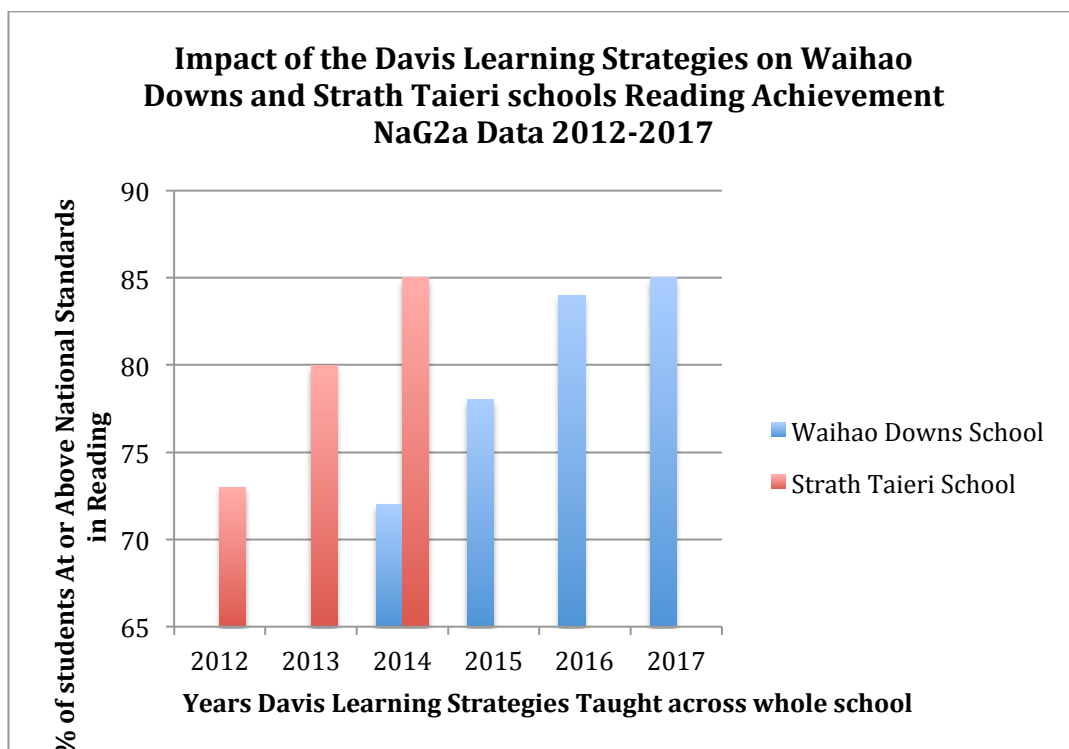
Analysis of Waihao Downs School reading data shows that: since 2014, every student who has gone through the Davis Learning Strategies programme in their first 2-3 years of school are reading at or above expected curriculum levels by the end of yr 3. (Excluding our High ORS funded student).

Data shows that students who enroll at Waihao Downs in yr3 and above who require remedial reading support (Tier 2) demonstrate accelerated reading progress within 6 months of undergoing a Davis Learning Strategies intervention remedial programme.

Comparing the school wide reading results over time from 2 schools that have/had embedded the Davis Learning Strategies® throughout their schools, shows a marked increase in the reading schools achievement results.

Factors impacting the sustained and continued improvement of school wide impact of the DLS on school wide reading results:

- Change of principal (driver)
- Change of trained staff
- Impact of ORS students on school wide results
- Impact of transient enrolling students needing remedial reading support.



Survey Monkey results

45 survey invitations were sent out and 21 teachers responded

Davis Focusing Strategies

- 66% of teachers responded that students were much calmer
- 89% of teachers responded that students were much more focused
- 28% of teachers noticed that student's were less anxious in class (check)
- 90% of teachers are using release in their classroom
- 81% of teachers are using focus in their classroom
- 67% of teachers are using dial in their classroom
- 42% of teachers are using koosh in their classroom
- 42% of teachers responded that the Davis Focusing Strategies are being used throughout the whole school.

Davis Reading Strategies

- 61% of teachers responded that they do not use the Davis Reading Strategies
- 22% have integrated the Davis Reading Strategies into their reading programme
- 17% are some of the Davis Reading Strategies into their reading programme

Student achievement improvement

- 56% of teachers noticed that student's letter formation was neater
- 44% of teachers had noticed that student's reading had improved
- 52% of teachers have noticed that the Davis Focusing Strategies have positively impacted their student's learning
- Teachers rated a 68% improvement in students ability to self manage as a result of using the Davis Learning Strategies

Impact on own teacher practice

- 100% of teachers have said the Davis Learning Strategies have changed their teaching practice in some way
- 71% of teachers have noticed that the Davis Focusing Strategies have had a positive impact on their classroom management

In response to the impact of the Davis Learning Strategy as a whole

- 55% of teachers found the Davis Learning Strategies easy to implement
- 75% of teachers found the Davis Learning Strategies effective
- 60% of teachers found the Davis Learning Strategies work for most children
- 65% of teachers found the "clay work" effective

Monitoring and Evaluating Impact

Findings from my sabbatical:

Visiting a range of NZ schools/kura to investigate how they are implementing the Davis Learning Strategies within their own unique educational context has been a privilege. Hearing the positive and sometimes life changing stories of both students and teachers alike has reinforced my belief that the Davis Learning Strategies is the fence at the top of the educational cliff which supports all our children (especially our dyslexic thinkers) to have success with reading specifically, but life in general.

Schools who introduce the Davis Learning Strategies® within their junior classrooms are providing an effective learning pathway that promote success for all learners
The power of the Davis Learning Strategies® to equip all our students with self-managing tools that allow individuals to successfully access learning while minimising any mislearning of letters and words is a powerful tool for our New Zealand teachers to add to their educational kete (bag).

The unique and easeful way that the Davis Learning Strategies® link the two-dimensional letters and symbols (that only make sense when seen from one perspective) to the natural three-dimensional picture thinking style of our young learners and our dyslexic thinkers in particular allows all students to experience success with reading.

The Davis Learning Strategies allow the dyslexic child the skill to utilise their right brain dyslexic thinking strengths, to decode and make sense of text successfully and easily.

The Davis Learning Strategies® support all our children to become successful, active lifelong learners.

To summarize my sabbatical findings:

- Schools who have regular ongoing mentor support while teachers are initially implementing the DLS, show greatest acceleration in reading for targeted students regardless of gender, ethnicity or demographic.
- Schools who use all aspects of the DLS are the ones that show the greater student acceleration than schools using only 1-2 of the Davis Learning Strategies
- The positive impacts on students to self regulate not only their learning but also anxiety; frustration and anger came strongly through the student voice.
- Teachers noticed a positive impact on their own professional teaching practices in the classroom
- It was difficult to deliver a quality Davis Learning Strategies programme in a team teaching situation due to disparity in DLS training, class routines and/or teacher motivation
- Schools that had regular targeted ongoing mentor support enjoyed the highest rates of reading acceleration of targeted students
- Larger schools found DLS more challenging to implement across year groups and teaching staff.
- That the Davis Learning Strategies can stand alone to accelerate student progress but can also be used effectively to reinforce existing school programmes to enhance student learning.

Sabbatical Inquiry Goal: To investigate the impact the Davis Learning Strategies has on NZ schools

1. What impact has the DLS intervention had on the reading achievement of targeted yr2-4 Children who are/were working below curriculum expectations?

Findings: After analyzing the pre and post DLS data collected on targeted students (students who were reading below curriculum expectation before DLS intervention) the following has been concluded.

- All targeted students who participated in the Davis Learning Strategies made gains with their reading.
 - Individual school percentages ranged from between 45% - 91% of students whom demonstrated accelerated progress in reading after Davis Reading Strategies over a 6 month period.
 - 65% (53/81) of the targeted students tracked in my sabbatical research attained the expected curriculum reading benchmark (National Standard) after participating the Davis Learning Strategies programme (within a 6 month period).
2. What impact does the DLS have on the achievement of students identified as MOE priority learners? (Maori, low socio-economic learners and those teachers have indicated are displaying dyslexic learning traits)
 - All priority learners within the study demonstrated improvement in reading levels, many demonstrating marked accelerated progress.

If anyone would like to know more about the Davis Learning Strategies please do not hesitate to contact Jane Severinsen dyslexialearn@gmail.com

References

- Brain Scans Show Dyslexics Read Better with Alternative Strategies. (n.d.). Retrieved from <https://www.dyslexia.com/research/articles/alternative-brain-pathways/>
- Davis, R. (2010). *The Gift of Dyslexia: Why Some of the Brightest People Can't Read and How They Can Learn*. London: Souvenir Press.
- Embracing Dyslexia: The Interviews - Maryanne Wolf, Ed.D* [Video file]. (2014, August 29). Retrieved from <https://www.youtube.com/watch?v=NyxRIVfrxJs&feature=share>
- The Evidence Base of Davis methods. (n.d.). Retrieved from <https://www.dyslexia.com/research/articles/evidence-base-methods/>
- The Nature of Learning principles revisited. (2013). *Educational Research and Innovation*, 153-183. doi:10.1787/9789264203488-9-en
- The New Zealand Curriculum / Kia ora - NZ Curriculum Online. (n.d.). Retrieved from <http://nzcurriculum.tki.org.nz/The-New-Zealand-Curriculum>
- Pfeiffer-2001. (n.d.). Retrieved from <https://www.dyslexia.com/reference/pfeiffer-2001/>
- South African Research - Success with Davis Methods. (n.d.). Retrieved from <https://www.dyslexia.com/research/articles/south-african-researchers/>
- Whitehead, R. N. (2017). *Why Tyrannosaurus But Not 'If'? The Dyslexic Blueprint for the Future of Education*. United Kingdom: Create-A-Word Books Ltd.