## SABBATICAL REPORT LEARNING DISORDERS AND TEACHING STRATEGIES THAT HELP SUPPORT THESE CHILDREN WITH THEIR LEARNING.

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## Acknowledgements:

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Special thanks to the Maungatapere School deputy principals for stepping up and all the staff for their commitment and ability ensuring the school continued as usual during the term.

Thank you also to the principals and teachers that welcomed me to visit, gave their time and shared their knowledge with me; and the experts that I talked with along the way:

Nae Nae Primary; Levin East School, Wakaaranga; Papatoetoe South, Blockhouse Bay Primary.

RTLB

It is always worthwhile visiting other schools to affirm what is happening in our own schools and challenge areas we can do better.

#### **Executive summary:**

There is an increasing number of children entering school with disabilities, disorders or difficulties engaging in learning. Supporting these children in main stream settings requires knowledge of the disability/disorder and the range of teaching strategies that reflect the identified needs of the children, and for schools providing a range of programmes that can also support targeted learning needs.

Many of the teaching strategies talked about include cooperative learning activities, dyslexia friendly strategies, Tuakana teina and Ka Hikitia strategies. There are also a range of programmes that can support children with their learning that often need to be purchased or funded.

All these have an impact on the school strategic planning, professional development and budget. They require decisions at all levels of the school

from whole school planning to special needs programmes and teachers' planning class programmes.

## **Purpose:**

To extend my knowledge of the volume of information there is related to learning difficulties and investigate different teaching strategies, techniques, programmes that will allow children with learning disabilities and disorders to engage in learning within the classroom and progress at their expected level.

## **Rationale and Background information:**

Over recent years we continue to have increased numbers of children with learning disabilities and difficulties engaging in learning activities within our schools. These particularly reflect children with dyslexia, dyspraxia and on the ASD spectrum. As a school we have been looking at ways to engage these children and support them in their learning, with teachers undertaking PD to create dyslexia friendly classrooms and to develop co-operative teaching strategies. Cooperative teaching strategies have been used to increase the engagement of all children in learning and the school has undertaken 2 days of professional development with the Kagan Cooperative Learning programme. Teachers have found these to be very successful in increasing the engagement of pupils in their classrooms.

We have also increased the number of programmes we use within our special needs programme to specifically support the children with learning disabilities particularly around dyslexia.

Ongoing change within education and demands around achievement also puts pressure on schools and subsequently teachers to have all children 'reaching their potential'.

From reading and talking with other principals, staff and experts I hope to be able to reflect on what we are doing to meet the needs of students with learning difficulties within our school, and where we want to go in the future to ensure all students have the opportunity to reach their potential.

This needs to be within a supportive classroom culture, where teachers are confident they are providing quality learning experiences for all their students, knowing their needs and meeting these as effectively as possible.

## Activities undertaken (methodology):

- ✓ Undertook a range of professional reading online, books
- ✓ Viewed numerous You Tube and video clips
- ✓ Visited schools using strong dyslexia programmes
- ✓ Visited schools using Kagan Co-operative learning
- ✓ Talked with local RTLB
- ✓ Attended Rural & Teaching Principals' Conference
- Reflection on what schools are doing, how they implement this across their school and in their teaching.
- Reflection on what we are currently doing: Is it working? How do we know? Can we do it better? How do we best achieve this?

## Findings:

#### From my Reading:

<u>ASD</u>: Autism spectrum disorder is a mental disorder with a neurobiological basis due to unusual connections within the brain. It is defined under the Diagnostic & Statistical Manual of Mental Health (DSM version 1V-R).

- There is huge variation with children at all points of the continuum from mild to severe all are different but predominantly boys.
- Often have high IQs
- Communication, social development delays most common
- Sensory processing difficulties include behaviour, attention, motor, emotional eg ADD, ADHD, repetitive behaviours
- Difficulties taking in, organising, planning, interacting and developing relationships
- VAA Verbal auditory agnosis inability to process sound normally. Difficulty to speak in front of others and use/read visual, facial expressions.
- At most severe can include hyperactivity, impulsivity, distractibility (HID); aggression, mood change (including depression &/or manic symptoms; stereotypic motor movements (including tics, Tourette syndrome); motor planning and motor sequencing issues; delusions, hallucinations and bizarre behaviour

<u>ADHD/ADD</u>: Attention deficit/hyperactivity disorder is a lifelong neurological condition that affects the way the brain receives, processes and responds to information causing inattention, hyperactivity and impulsivity. It affects between 2-5% and is becoming more common. Students are often energetic, creative and good problem solvers but need support with sensory integration, thinking and social interaction.

3 types – inattentive type, hyperactive/impulsive type, combined type.

<u>Dyslexia:</u> Difficulties between language, organisation and short term memory. Affects reading and writing and spelling. Can also include difficulties in auditory/visual perception, planning and organisation, short term memory, motor skills and social interaction.

Laughton King sees it as a difference between visual and language (right/left brain) with dyslexics working in the strong visual area in pictures. If you cannot see a picture your understanding/interpretation of oral messages breaks down.

<u>Dyspraxia</u>: (Developmental coordination disorder) is a neurological based impairment that often affects motor skills, language, social interactions and ability to organise self. Is often with or part of other neurological conditions. Students often need support in learning, planning, speech, and coordinating movements in sequence to achieve an objective.

<u>Hearing/Vision</u>: Difficulties also include a wide range of difficulties for students especially around understanding and communication.

Speech, Language and communication disorders also reflect wide differences between students. They may need support with understanding and using language, speaking clearly and fluently and interacting with others.

Many students have multiple difficulties that often are linked or inter connected and can be difficult to specifically identify or label. It is therefore important to look at each student individually in relation to their needs and build knowledge about them. The MOE Inclusive Education Guides for Schools refers to the development of 'Learner Profiles' for all students with learning difficulties.

# Suggested Adaptions to support students with learning difficulties and disorders in classrooms:

- Cognitive Behaviour Therapy to reduce/learn how to deal with anxiety
- MOE Inclusive Education Guidelines promote the ULD (Universal Design for Learning) approach using a variety of ways to present material for ASD/Autism/ADHD. Developed by David Rose it reduces barriers to learning by incorporating use of technology & choice in presentation, teaching etc.
- Clear established and stable class routines, layout
- Visual supports eg timetables
- Visual/digital presentation so students can adapt to their needs
- Maximising hands on learning, practical activities
- Focus on student strengths
- Break up learning with physical activity, relaxation breaks, movement activities, singing
- Provide a variety of furniture within the classroom for students to work at
- Provide sensory, tactile resources for hyperactive students
- Chunk, break down instructions to short segments
- Simplified instructions with fewer words & given slowly
- Allow choice on how to communicate ideas and present work
- Frequent positive feedback
- Think time
- Use of graphic organisers
- Assistive technology, multimedia tools
- Collaborative, peer mentoring
- Cooperative learning, group work with mixed abilities
- Support for assessment processes
- Access to quiet spaces to avoid overload
- Develop socialisation through modelling, guided opportunities to practice
- Coaching others to understand a different perspective
- Understand and respond to the function of the behaviour (why) rather than the behaviour itself
- Allow students to adapt learning, environment to meet their needs

- Personalise learning with success criteria, visual prompts, quiet work spaces etc
- Lots of opportunities for listening and speaking
- Top down big picture first

## Suggested Resources/Programmes:

- Dr David Rouse Universal Design for Learning UDL You Tube video <u>https://www.youtube.com/watch?v=MbGkL06EU90</u>
- About Dyslexia MOE resource for schools
- 4D Approach from Dyslexia NZ
- Neil MacKay "Removing Dyslexia as a Barrier for Achievement"
- PB4L- Positive Behaviour for Learning programme MOE
- UK Total Teaching book & video <u>www.actiondyslexia.co.uk</u>
- www.autismtoolbox.co.uk
- Laughton King books: Reaching the Reluctant Learner; Dyslexia Dismantled; With not Against
- Literacy Online resource MOE
- Lexia programme
- Steps to Literacy programme
- Quick Sixty programme
- MOE Inclusive Education website
- Dyslexia Friendly schools

## **Questions/Observations:**

# Where are the experts trained in these disorders that can support families and schools?

There is a wealth of information in the form of websites, blogs etc that can be easily accessed; in particular, on the MOE Inclusive Education website and specific UK websites relating to the different learning disabilities. However, access to expertise and therapy treatments are not hugely talked about particularly in NZ. There is also no discussion about medication that may or may not be appropriate especially for more severe neurological disorders.

Dr Oliver Mudford (Auckland University) reviewed the MOE guidelines relating to Autism and was critical of the fact the research base and experts involved were very narrow. Research in relation to autism strongly recommends behavioural interventions but these are not mentioned. Applied Behaviour Analysis has been 70% beneficial for young children with good effects for educational and challenging behavioural interventions.

Early Intensive Intervention, 1:1 teaching for more than a year starting in the home then moving to educational settings and involving parents as cotherapists makes positive change but is not mentioned. There are11 established treatments available.

While these are not programmes, adaptations that teachers can apply they would have a significant impact on many families, classrooms and teachers struggling with more severe autistic students.

#### Cooperative Learning – Where does it fit?

'Without the cooperation of its 33members' society cannot survive...' (Ashley Montagu 1965).

David and Roger Johnson have undertaken considerable research into cooperative learning which has been relatively ignored with the current competitive, individualistic focus on learning. The theory and development goes back to the early 1900s with the Gestalt School of Psychology where groups were seen as dynamic wholes in which the interdependence of members is the key. Johnson & Johnson 2008 recognise 4 types of cooperative learning – formal (long term groups to achieve a goal; informal (short term, temporary ad hoc groups); cooperative base groups (long term heterogeneous learning groups with stable membership) and a combination of these.

To be cooperative 5 essential elements need to be carefully structured – positive interdependence, individual and group accountability, promotive interaction, appropriate use of social skills and group processing.

Considerable research backs the positive results (see below), however it does require careful planning and organisation to ensure all the essential elements are present.

Many of the strategies and adaptations suggested in the resources listed above are cooperative, inclusive, reflecting group and peer support as well as modelling lots of oral and visual cues. Cooperative and group learning incorporates these.

Cooperative learning has been well trialled with evidence showing:

- Special needs students improve academically and in self esteem
- Attitudes towards them improve they are better liked
- Allows positive interaction with peers through being part of a community of learning
- Teachers are seen as someone who coaches/assists and are on the learners' side
- There is a transference of skills
- Social skills improve though modelling and mediation (Vygotsky's zone of proximal development)
- Promotes positive interdependence from working as a team and needing each other to complete a task
- There is independent accountability within the group
- Equal participation for all including different personalities, abilities, ethnic and social groups through turn taking, time allocation, think time, rules and individual accountability.
- More students are actively engaged at the same time
- It promotes Ka Hikitia strategies and Tuakana Teina theory

#### Kagan Co-operative Learning: www.kagan.nz

This is a programme developed by Dr Spencer Kagan and his son Miguel Kagan taking cooperative learning ideas and implementing them using a wide range of teaching structures. These can be incorporated into any part of the curriculum, without the need to undertake considerable planning. "Kagan is a multi-faceted strategy proven to create full engagement and equity for all learners, as well as develop social and communication skills in an inclusive and safe, brain friendly environment"

Key points:

- It has refined cooperative learning to make it manageable through the development of cooperative teaching structures
- Kagan uses simple structures that are content free so can be applied to any teaching
- Uses teams that are heterogeneous (mixed), homogeneous, random and sometimes student selected
- It is an integrated approach
- It uses student voice and choice
- Social interaction is used to increase brain engagement verbal, non-verbal, use of emotion
- Uses positive attention and recognition within groups
- Strongly incorporates class and team building creating a culture that is safe and supportive. Students get to know each other and others in the class.
- Develops and fosters social skills by using structures; roles, modelling, reinforcement, reflection & planning
- Incorporates the basic principles of positive interdependence, individual accountability, equal participation and simultaneous interactions
- Has strong links to brain research
- Incorporates academic processes of building knowledge, processing information, thinking skills and presenting information.

## **Observations from School visits:**

I visited 6 schools that were either using the Kagan Cooperative Learning programme or were Dyslexia Friendly. Schools generally introduced these programmes/strategies to engage students more in their learning. It is important to get teacher buy in as with any professional development and as a result the schools often made a considerable financial commitment in the form of teacher only days, external trainer and individual coaching.

From discussions I made the following observations:

- Cooperative learning was generally implemented to improve social interactions and engagement for all students
- Both promoted and reinforced key school values and key competencies
- Kagan structures gave equity to cooperative learning and made it easy for teachers to implement.
- Programmes were implemented with whole school professional development and individual teacher coaching (especially Kagan)
- They were generally linked to teacher appraisal and goals to promote school wide implementation (often using video evidence)
- Children respond well to the structure, routine and working together. They know more about each other their culture, families, interests
- Students are more engaged and happy in their learning

- Teaching rather than behaviour becomes the focus and teacher management strategies have improved
- Teachers are seeing changes in behaviour and engagement of students which will lead on to academic achievement in time
- Modelling and teacher observations are ongoing often with a focus area or structure
- Numbers of stand downs and suspensions have improved where this was a concern
- Students with special needs are being supported, scaffolded, included more: including ESOL students
- Teachers are also seeing change in the way students work together, support each other, can make mistakes and feel supported. Much more inclusive.
- Students have higher expectations of themselves as they feel supported
- Kagan structures are being incorporated at all levels senior management staff meetings and even at BOT level.
- In some schools support staff have been part of the training
- Strategies have been included in school strategic plans via curriculum goals, values and key competency focus. Also linked in through health and wellbeing strategic planning.

## Implications:

As school leaders and teachers we are continually being challenged to lift achievement for all and especially for priority learners. There has almost been a culture of blame hanging over our heads that we are not doing enough for students who are not meeting expected standards at set times in education. At the same time there is an increasing number of students being diagnosed with a growing range of learning disabilities and disorders. The focus has narrowed the curriculum for many and especially for those who may have other strengths.

Our NZ Curriculum document with its inquiry model, focus on key competencies and the ability to design a relevant local curriculum that reflects our communities, also enables us to develop our teaching philosophy and use a wide variety of teaching and learning strategies.

The adaptations and strategies I have read about and seen in action are stated as assisting students across a range of learning disabilities, and they also fit with the strategies focussed in Ka Hikitia (learning approaches that are engaging, effective and enjoyable).

For our school, finding ways to engage all students in learning has been a focus and like many other schools we are looking at different teaching strategies that can help achieve this.

Cooperative learning has been something many of our teachers have begun to use but effectively implementing this to ensure equity and maximise engagement is something that the Kagan cooperative structures have certainly assisted with. From the readings and school visits they also are inclusive of many of the dyslexia friendly and ASD strategies.

Involvement in a Science LCN has been an incentive to provide lots of opportunities for hands on learning experiences that have also incorporated many cooperative

structures. We now need to consider how does this fit with engaging students and where to next for our science curriculum?

Cooperation and collaboration are important, not just from the aspect of student engagement but also for our teachers. Sharing, modelling, talking, reading and challenging each other in teaching inquiries and during professional development help clarify thinking, answer questions, build confidence, and resilience to take risks in our teaching. This is the culture we are building in our classrooms and also we hope is one modelled within our school.

#### Where to next for Maungatapere School:

2017 is a year of major reflection and review as we look at developing our next strategic plan. Part of this needs to include all staff, Board of Trustees and community looking at our next steps in this area:

What are we currently doing to engage our pupils? Is it working? How do we know? Do we continue on our current journey? If so what are our next steps for staff, students, family/whanau? How will we know we are making a change as a result of these? If not where to next?

#### **Conclusions:**

No specific programme or strategy is going to work for every child or for every teacher but the more 'tools' we have in our 'tool box' the more we have to draw on to meet the needs of the children we are working with.

Having the opportunity to visit other schools and talk about their journeys has not only allowed me to reflect on where Maungatapere School is currently but also to help clarify where we might go in the future.

The professional conversations are something that we often don't have time for, so I am very grateful to those that gave up their time to talk with me.

It is also important that where ever our journey takes us we travel as a school community with all those involved being part of it, reflecting our beliefs and aspirations for our children for the future.

Having the time to reflect on where we are currently has also been worthwhile as it has highlighted the great work our teachers are doing to meet the needs of all learners and their willingness to continually develop as professionals.

Having a supportive community that values what we do has also been highlighted as part of this.

This time has affirmed that our school community can be proud of the high standard of education that results from this.

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