

The Impact of 'Place' on Autistic Children

**The move towards collaborative/flexible learning spaces in New Zealand
and the needs of children on the autistic spectrum.**

**A report of research
undertaken during a Ministry of Education
Primary Principal's sabbatical/study leave, Term 2, 2017.**

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Sabbatical Report:

The impact of 'place' on autistic children.

Introduction and scope:

New Zealand is undergoing a transformation in teaching and learning with regard to learning spaces and collaborative learning. This transformation involves change with regard to pedagogy, practice and place. This report focuses mainly on 'place' as the catalyst for changes in pedagogy and practice in New Zealand education, born out of one of the country's worst natural disasters, the Canterbury earthquakes of 2011. It focuses in particular on the impact of place on autistic children, some of our most vulnerable priority learners.

Soon after the February 2011 Canterbury earthquakes it became apparent that many schools, especially in Christchurch, would need to be rebuilt, remodelled and repaired. The New Zealand Ministry of Education (then Minister of Education Hon. Hekia Parata) decreed that all schools would become what they termed MLEs, 'Modern Learning Environments' (termed in this report Collaborative Learning Spaces). Prior to the earthquakes some schools had pioneered a move towards greater collaboration and more open, shared learning spaces based on research and teacher development of pedagogy and practice. The MoE, however, tipped the process upside down by stipulating place and then gradually supporting, to varying degrees, the key foundational change required in pedagogy and practice. In a Christchurch community still rocked by thousands of aftershocks, grieving for 185 dead and hundreds injured, with much of the city damaged and with significant social dislocation, the timing of this decree was challenging.

Schools in Christchurch are still undergoing huge change. Redwood School, for example, has made significant moves towards collaborative learning in shared learning spaces, with some spaces modified as prototypes aimed at creating spaces that are much more conducive to collaborative teaching approaches. However, seven years after the earthquakes and the school is yet to be repaired, remodelled and in the case of some buildings replaced. Many other schools are also in this situation.

This report aims to prompt all schools to carefully consider the needs of autistic learners and their families when remodelling, redeveloping or replacing buildings or outdoor spaces. The ideas, feedback, and concepts included through this report would benefit the learning and wellbeing of all autistic learners, would make a significant difference to priority learners (those with special learning needs) and would positively impact the development of all learners.

There is clearly strong interconnection between pedagogy, practice and place, and strong and lasting educational change, usually following in that order. Thus, schools considering place for autistic children must ideally first carefully consider pedagogical foundations and best practice. The teacher and their practice make the biggest difference regardless of place. This report also touches on this interconnection.

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1. Context: Why this topic?

The first imperative

I begin with a quote from Ann de Roek (1997), a Belgian researcher in autism:

Due to the distinct way people with autism perceive their environment and process incoming information they make sense of their world in a unique way.

This paper is a beginning in that it gives a glimpse of the impact of Collaborative Learning Spaces on autistic children and some pointers as to what might work for these priority learners to assist them in their learning and making sense of their world. It has sprung from my background in teaching but also in parenthood. Having a son with Asperger's Syndrome, a condition forming part of the autistic spectrum, Belinda and I have experienced the impact of pedagogy, practice and place on his development and learning. In our case, and the case of many parents of children with autism, a roller-coaster ride through the years... hang on tight, suppress the fear and grit your teeth with every twist, turn and jolt.

I have also viewed pedagogy, practice and place from within education. The emotions and experience for me have been similar as a teacher, leader and principal. I have watched as many autistic children have often been misunderstood and their parents' concerns misinterpreted. Living with an autistic son or daughter in the family has its many rewards, but it is also not easy. The usual hurdles and challenges of life are magnified many-fold for child and family through being autistic.

I have been an 'educator', or teacher as I prefer, since 1981. My first class of bright-eyed Year 5s, 26 of them, looking expectantly to me to guide them through their learning and some of their living for about forty weeks. I loved it and learnt a lot. One of the biggest impressions I gained was 'variety'. From big-hearted Sean, kind-hearted Susie, unconfident Graeme, quick-witted Adam, affection-seeking Kirsty, needy Stephen, and mind-blowingly bright and funny Pippa and Aaron; this was a class of personalities and characters. Looking back, there was one little boy, who was one of three children transferred to my class from a neighbouring room, who was undoubtedly on the autistic spectrum.

For me at that time, autism hadn't even come up in conversation in the school. I don't remember much about it at Teachers' College or University, although I had come across the name Asperger and a few other aspects in my psychology papers. There was no Ministry of Education help or diagnosis for this unconfident little boy. All I knew was that he was bright, loved running, had 'issues' in relating to others and seemed to be in his 'own world' at times. I took it as a 'pat on the back' at the time that he had been transferred to me from the absolute chaos in the neighbouring classroom and the negative attentions of a very spiteful teacher. His parents' absolute relief at him being liberated from his previous room meant that they were automatically positive towards me – a distinct advantage. One key was that he loved running. That was an important aspect I was able to quickly latch onto because I was a compulsive runner and he saw that as something in common to celebrate. Through this and some other pathways he could be built back up. We had a very successful year but not through any great knowledge of mine as to how to get the best outcomes for autistic children.

The huge learning curve regarding understanding of autistic children, their strengths and needs and the pressure on their families came through my own son. He has taught me a lot. He was to experience an education system that was not conducive to fostering success in those on the autistic spectrum. Diagnosis of Asperger Syndrome did not exist in New Zealand at the time, and he was not assessed until crisis point in his mid-teen years. Schools were poor at understanding and responding to children with autism. Our son was to lurch through primary education, alternating between naturally

empathetic and perceptive teachers one year to authoritarian and negative the next - built up then pulled down. Extra support was rare and being negatively targeted by staff and children was common. As parents this was a challenge we had not expected; there is no manual for parenting but there wasn't even a leaflet for parenting a child on the autistic spectrum. For us, every day at school was a potential disaster, until he was home-schooled and later became a founding student, one of forty, at Christchurch's 'radical' school *Unlimited Paenga Tawhiti*.

Through my son teaching me, I have now influenced a number of autistic children through my own classroom teaching and leadership. I hope that I have been able to add to the success of all of them. As a school leader I am now very aware that the decisions we make on both a micro (daily learning) and macro (systems and procedures) level have significant impact on the learning of our tamariki, especially our priority learners, particularly those on the autistic spectrum. That impact, in turn, flows through to each of their families.

We have a responsibility to consider very carefully the impact of pedagogy, practice and place on the social, emotional, and academic development of all our priority learners. The "We" at the beginning of this paragraph includes Government/Ministry of Education, school Boards of Trustees, teachers, school leaders and Principals. This paper, although focussing primarily on autistic children, will hopefully give some insight to the impact collaborative learning approaches and spaces may have on the development of *all* priority learners. It will also indicate what schools might be able to do to include input and feedback from the families of these priority learners to bring about better outcomes for them in the future.

He taonga rongonui te aroha ki te tangata

Goodwill towards others is a precious treasure.

This whakataukī means we must use this precious treasure of goodwill to make a positive difference for those around us.

The second imperative

Christchurch, New Zealand, 22 February 2011... an unforgettable event.

A significant event shook my world in 2011. At 12:51 pm on 22 February 2011 I was driving along a Christchurch street in quite heavy traffic having left school some twenty minutes beforehand to attend a meeting. Suddenly, without warning, my car felt as though it was losing all four wheels. The ground rippled in waves, power poles swung in an arc and the road cracked open and oozed water and mud. In that second or so I was also aware of a large bus looming in my rear vision mirror. I braked, praying that the bus would stop in time. It did.

The ground continued to roll and the street gutters ran with muddy water. After the first earthquake I stepped out of my car to check on other drivers. There was no panic, and the traffic flow resumed, but significant damage had been done to our city. I continued to my meeting as the centre of Christchurch was evacuated. Soon afterwards I tried to return across town to school but was met by an orderly stream of traffic, evacuees from the city centre, the traumatic experience evident on their faces. Massive aftershocks every few minutes continued to convulse the ground.

I knew that there was no way I could return to school. Water mains were broken, roads damaged and buildings damaged and destroyed. I eventually got back home. I realised that the city was damaged but did not know the extent. No power, no water, no cell phones, sirens, helicopters, and one after

another the earthquakes rolled through. Little did I know but the earthquakes would be a catalyst for major educational change across Christchurch and our province of Canterbury.

In the years to come there were thousands of aftershocks. The centre of the city was devastated. Hill and eastern suburbs were badly damaged. 185 died and over 1,500 were injured. This event followed a large earthquake which had struck Canterbury in September 2010 and had already weakened some buildings and infrastructure. The rebuild of the city continues today, some seven years after the main earthquake.

For schools in Christchurch and its surrounds, it was decreed in 2012 by the then National Party Government and the pragmatic Minister of Education, Hekia Parata, that all schools would be rebuilt/replaced/repared as 'Modern Learning Environments' (MLEs). This meant collaborative, shared learning spaces. Place was decreed before pedagogy, so the pressure was placed on schools to go the MLE way whether ready to or not. The rebuild of damaged or wrecked schools began as schools and communities were trying to manage the devastating change the earthquakes had brought to a grieving city. This change included the closing and amalgamation of some schools, once the heart of their communities. Time was ticking, and schools were expected to 'run' with MLEs and collaboration.

Hence the timing of my Principal's sabbatical to research the influence of place on the learning of our autistic children. Our school moves towards redevelopment/rebuild in 2019, eight years after the February 2011 earthquake. It's a long time to wait without property money, which has been frozen by the Ministry of Education as it works its way through school repair and redevelopment projects. However, we are looking forward to having a better school in the future. Although implemented poorly, including appalling timing, by the Government of the day, I do support collaborative learning in more flexible and open learning spaces, but the key word is *flexible!* A large, open shared learning space is as inflexible as a single-cell one-teacher classroom.

My research will assist us in redeveloping Redwood School in Christchurch as a much more learner-friendly, collaborative learning environment. Fortunately we have had a few years to prototype learning spaces as well as applying, reviewing and adapting our pedagogy and practice so we can get the best advantage out of place. Schools early in the rebuild queue did not have the time to do this before their learning spaces were built and some now have the unenviable task of backtracking and rethinking the spaces they have created.

Whāia te iti kahurangi ki te tūohu koe me he maunga teitei

Seek the treasure you value most dearly: if you bow your head, let it be to a lofty mountain

This whakataukī is about aiming high for what is truly valuable, but its real message is to be persistent and don't let obstacles stop you from reaching your goal.

The third imperative

Redwood School has had a significant number of children come through its doors who are diagnosed officially as, or are recognised as being, on the autistic spectrum. The autistic spectrum is a wide one. The school has worked hard for its autistic children and built up a strong depth of knowledge around pedagogy and practice to best cater for their needs. Our kaiako (teachers) and kaiawhina (teacher aides) are dedicated towards bringing about the best possible outcomes for all our priority learners, including our autistic children. A telling comment was made by a visiting Ministry of Education specialist: *You have a large number of children with autism but what really tells a story is that you retain them.*

We want to retain our autistic children so we can give them the continuity of care and learning to set them up for later life. The careful consideration of place for our autistic children and including their families in planning that place is very important.

Whāia te mātauranga hei oranga mō koutou.

Seek after learning for the sake of your wellbeing.

We learn from and about our autistic children, this learning enhances their wellbeing and ours.

2. Methodology for this research:

My research has three foci:

- A. A research review of the influence of collaborative learning spaces on learners with autism;
- B. A survey of parents of children with autism around school consultation about collaborative practice and learning spaces; and
- C. A review of Professor Tony Attwood's thoughts and perceptions on the impact of collaborative learning spaces on children with Asperger's Syndrome. Tony Attwood is Associate Professor, Griffith University, Queensland.

These foci reflect my desire to collect information to assist schools in their consideration of learning needs for a key group of priority learners, children on the autistic spectrum.

A fourth avenue that would be a valuable one to pursue would be a survey of schools as to their perceptions of their consultation process with parents of autistic children about school redevelopment and catering for autistic children. This may be undertaken separate to this research.

Size of survey sample

It is to be noted that the survey of parents gave a smaller number of responses than was hoped. The sample gave some useful data and trends. It also provided opportunity for some very insightful responses in comment sections which adds to our knowledge of what has been happening regarding school redevelopments.

However, I am also aware of the pitfalls of extrapolating the findings of this research too far. The glimpse provided by this sample could be called an 'appetiser'. The survey was quite a long one with an average completion time of 16 minutes. A next step would be to shorten the survey so that 'slivers' of the findings so far could be investigated in more depth due to a higher return rate. The author, if time allowed, would investigate further how schools had involved parents and students in the consultation and design process of the school's flexible learning environments.

3. Results:

3a. Research Review

This was, unsurprisingly, not a very rewarding exercise, especially with regard to New Zealand research. However, some overseas papers written by educationists and architects give some clear indicators as to important aspects of 'place' to consider (see reference list)

Spanish researchers into autism and architecture Francisco Vazquez (University of Cartagena) and Alejandra Torres (University of Madrid) express this dearth of research succinctly in a letter to the Editor of www.scielo.br, 2013: *It has been proven that existing research regarding the relationship between Architectural Space and people with Autistic Spectrum Disorders (ASD) is scarce, despite extensive research being carried out in recent years into autism.* Little has changed over the past 5-6 years and their observation is still very relevant.

They go on to state: *The essential characteristics of autistic spectrum are reflected in the extreme difficulty when changing activity, including simply moving from one space to another. The inability to 'imagine' and create a mental image of what might be on the other side of the door is enough to trigger panic attack.*

The architect solves this problem by 'anticipating' the activities to be carried out, responding to this inability to create a mental image by designing a clear structure and adding elements that provide the built element with a certain level of order and unity, resulting in a building which is easy to read, predictable and even 'imaginable'.

McAllister, K., & Hadjri, K. (2013) express the challenges of 'place' for those with ASD: For the pupil with autistic spectrum disorder (ASD), like many children with special education needs (SEN), attending a mainstream school is fraught with many potential difficulties. The incidental, change and surprise inherent in the school environment that may delight many pupils can, for the pupil with ASD, make school a difficult and even frightening place. This is because children with ASD, irrespective of their individual needs, share a common difficulty in 'making sense of the world around them'

The reference list in the Ministry of Education's *The Impact of Physical Design on Student Outcomes* (Wall, 2016) is useful. It provides over 160 references for further exploration. Of these around 20 are specifically written with children's specific physical, social, emotional or learning needs in mind (hearing impaired, physical disability, behavioural needs, autistic, ADHD, etc). The publication itself gives some general guidance with regard to collaborative learning space design to accommodate the needs of learning needs children.

Iain Scott, an architect from Edinburgh, in his article *Designing Learning Spaces for children on the Autism Spectrum* (2009) has some very practical advice from a UK context and highlights the following:

- ordered and comprehensible spatial structure
- provision of a mix of large and small spaces
- greater control of the environmental conditions to the user
- accommodation of different 'autistic-specific' teaching methods
- balancing security and independence
- providing simple and reduced interior decoration
- end-users (tamariki and whānau) to be actively involved in the brief, building and design process

- appropriate use of technology

These aspects have been considered within the UK teaching context at the time, generally of single-cell classrooms/learning spaces and separate facilities designed for special needs children. However, these concepts are very applicable to the New Zealand experience either directly or with adaptation.

More recently an 'autism specialist architect' Simon Humphreys from the UK (www.simonhumphreys.co.uk) has expressed the architectural elements which need to be considered for our autistic tamariki as:

- Calm and order: reduce stimulation, predictable
- Clarity and simplicity: symmetry, ease of use, rhythm, routine, sequence
- Proportion: the golden proportion (golden rectangle), scale, harmony
- Restraint: Less rather than more, limit complexity of detail, calm architecture
- The senses: Good acoustics, even levels of natural light, texture, good ventilation, cool colours
- Observation: Ability to observe children without intrusion, safety
- Containment: Places to escape from immediate demands but safe within enclosure
- Distinction: Simple, clear forms, distinction between spaces for work, leisure and living
- Materials: Limit number, durable, good sound qualities, calm, natural.

Nearly all of these considerations would apply to the vast bulk of our learning needs children and many of them have relevance for all our tamariki. These factors align with what could be called enlightened pedagogy.

Iain Scott from the Edinburgh School of Architecture and Landscape Design in a project in which he focuses on collaborative input into learning space design by secondary students on the autistic spectrum concludes that there is a real need to have direct input from them and their family.

Keith McCallister (Queen's University, Belfast, UK) stresses the need for a balance between catering for the needs of the student on the autistic spectrum through careful learning space design but also realising we are preparing these students to cope in an unpredictable wider environment. He encapsulates this in a 'triad of challenges: *As designers we have a triad of challenges to overcome. Not only are there the challenges of the differing severity of autism inherent within the spectrum and secondly the varying range of sensory difficulty of individual ASD sufferers to contend with, there is the third difficulty in the classroom setting to consider – how best to promote and bring change and subsequent independence for the ASD pupil in the environment. Overcoming the triad of challenges for designers will hopefully then allow in a school setting the design of the best possible and most appropriate learning environment that will aid pupil performance.*

Here McCallister touches on three aspects which require careful consideration. Firstly, the environment must be comfortable for ASD children to work in, thus catering for their needs. Secondly the environment must also be challenging enough to develop resilience and some degree of flexibility in children to live in the wider world. Thirdly, by implication, in New Zealand where ASD students are predominantly integrated into mainstream schools, the design of these learning spaces must be considered carefully for ASD children within the wider context of the spaces being for a general school population.

These findings are repeated in other studies and by other researchers and educationists. However, as already mentioned, worthwhile and soundly based research on this topic is sparse. Please refer to the reference list at the end of this paper for additional material relevant to autistic children in collaborative learning environments (MLEs).

3b. Survey of parents of autistic students

Purpose:

The survey was designed to gain a glimpse of the perceptions of parents/caregivers of autistic children with regard to:

- a. how proactive schools have been in addressing needs of autistic children
- b. the consultation processes (if any) undertaken by their child's school regarding learning spaces
- c. their thoughts and concerns about collaborative teaching and learning spaces

Sample:

The survey was distributed via Autism New Zealand in an on-line Survey Monkey format. There were 36 responses.

Survey content:

The survey took participants an average of 20 minutes to complete. The 24 questions fell into these four general categories:

- a. Questions 1-3. General questions about their child's school
- b. Questions 4-10. Perceptions they have as to how well the school caters for their child's needs and keeps them included and informed about their progress, next steps, etc.
- c. Questions 11-18. Feedback regarding the school's consultation with parents about redevelopment and collaborative learning spaces and teaching techniques in these spaces.
- d. Questions 19-23. Feedback and comment collaborative learning spaces and teaching in relation to their child and their needs.

Summary of Responses:

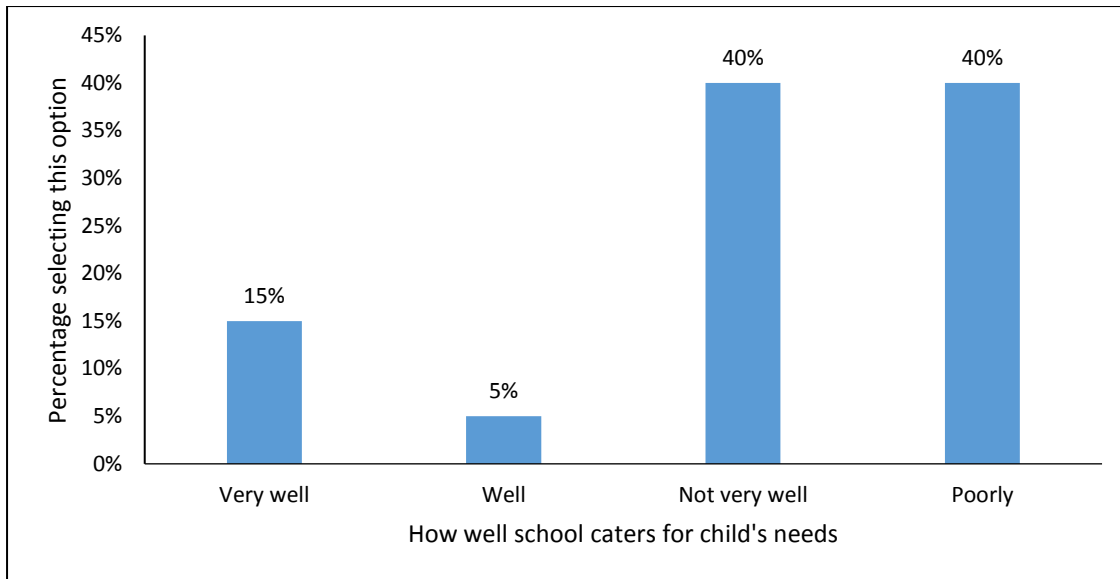
Questions 1-3: The children's schools

- 51% had been redeveloped with collaborative learning spaces, 17% currently being redeveloped, 8.5% in the planning stage, 23% yet to start.
- 25% of schools were combining two classes into each collaborative learning space, 23% three classes, 11% four or five classes, 23% a mix of combinations, 17% did not know what the school was going to do.
- 3% of children were in schools of less than roll of 100, 18% in school with roll 100-200, 18% in school with roll 201-300, 12% in school with roll 301-450, 50% in school with roll 450+

Discussion: It appears that half of the respondents had children in schools that had already been redeveloped and a further 17% were being redeveloped at that time. Extrapolating these figures, at the time of survey completion, at least two thirds of schools should have carried out a consultative and inclusive process of planning with their communities. This should have included canvassing the input of parents of priority learners including those parents of children with autism.

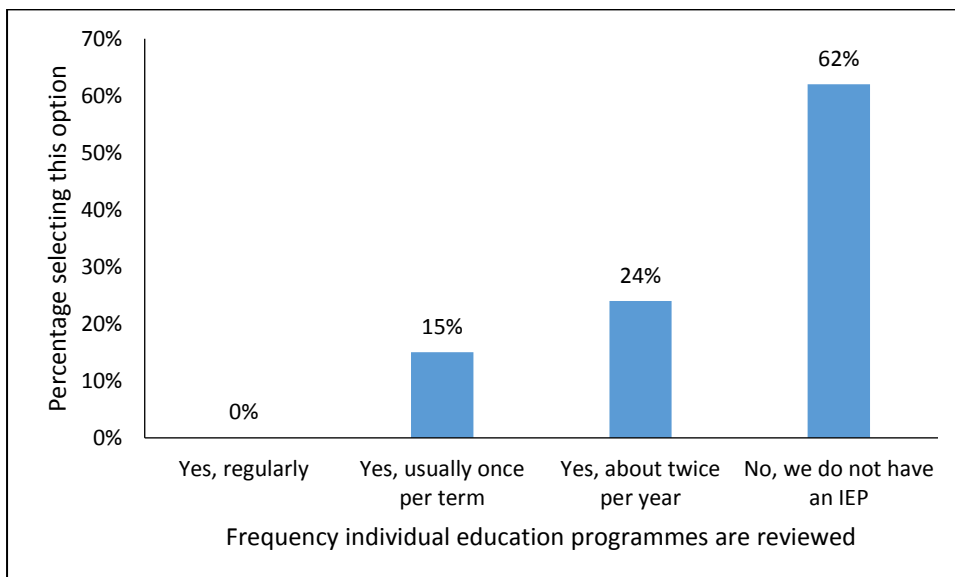
Schools catering for needs and including parents

Question 4: School knowledge and understanding



Discussion: The large majority of respondents felt schools did not cater for autistic children well with regards to needs/strengths being addressed, approaches being flexible, understanding and support for autistic children, and knowledge consistency across staff. This is a common perception for parents of autistic children and is a concern. It is an issue that arises due to lack of Ministry of Education support for autistic children and also lack of teacher understanding of autistic children and their needs. Additionally, parents of autistic children often do not have an easy task to get the best for their child and feel that they and their child are misunderstood.

Question 5: Adapted learning programmes for autistic children



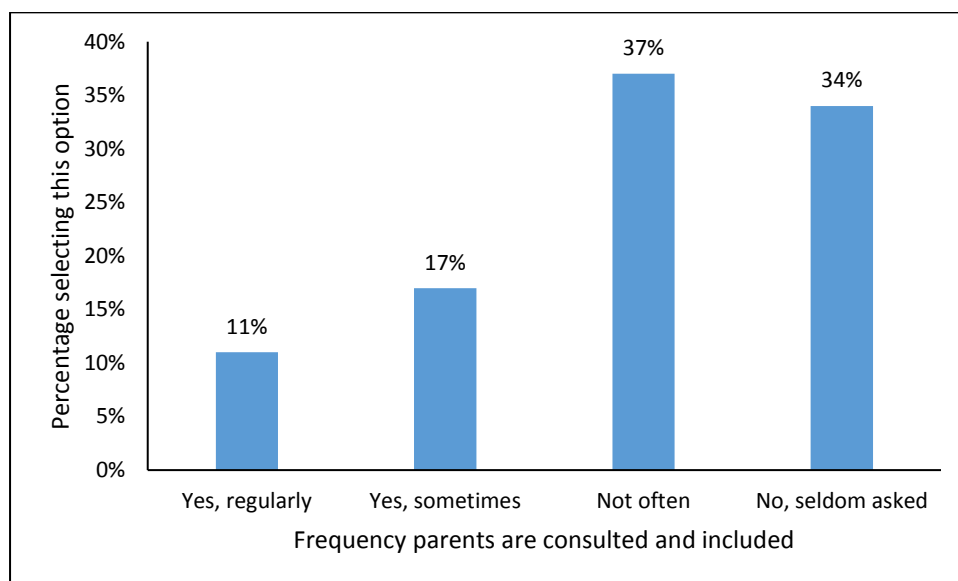
Discussion: 39% of respondents' children met at least twice a year to review and adapt learning programmes with the school for their children. This is a reasonable proportion but it is hard to discern what proportion of the respondents' children would warrant the need for more regular review. It is

also difficult to interpret how often parents are able to informally, on a regular basis, catch up with staff about their child's learning programmes.

Question 6: Extra learning support programmes or hours

There were 34 responses to this question. 19 respondents stated their child received no dedicated hours of support from a teacher or teacher aide, this is 56%. 11 stated their child received teacher aide hours assigned to their child (32%). 3 mentioned assistive technology and two each stated their child received special assistance through the Ongoing Resourcing Scheme (ORS) or Resource Teacher of Learning and Behaviour. Some children received more than one form of support.

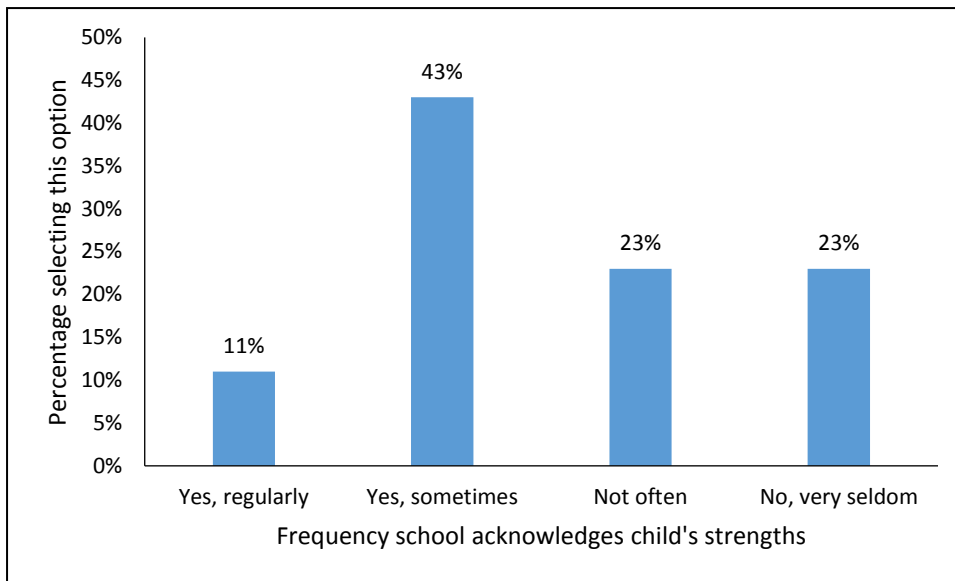
Question 7: School inclusion and seeking of parent input



Discussion: 71% of respondents chose 'seldom' or 'not often' asked or consulted about their child. Concern levels for parents/whānau of autistic tamariki is high. The perception was that schools were often lacking in implementing proactive and individualised learning programmes for children on the autistic spectrum. Support for many autistic children is required for them to function well day to day.

Parents are a key resource as they know a lot about their child, especially those with children with high needs. It is important that parents of autistic children are given the opportunity to give meaningful input and are listened to. The vast majority of parents of autistic children realise a school's resources are finite and are realistic about what resources can be made available for their child, they do, however, want to be significantly included in their child's learning.

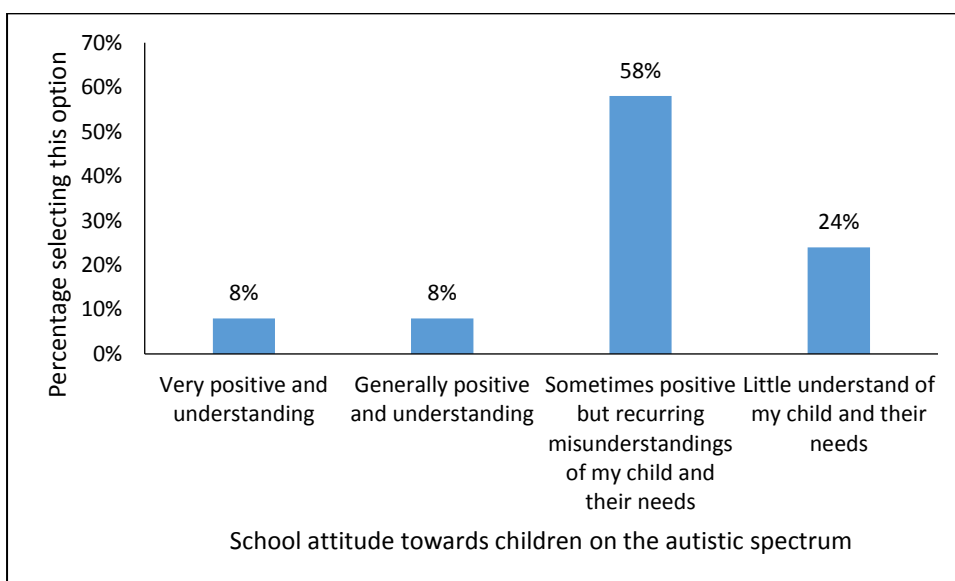
Question 8: Recognising their autistic child's strengths



Discussion: 54% of respondents said their child's school regularly or sometimes recognised their child's strengths. To gauge how this differs from the school's general recognition of children's strengths would require the same question to be asked of those whose child(ren) are not on the spectrum. Many parents of autistic children receive negative feedback about their child's academic and social development. Autistic children often do not meet normative milestones, especially socially. Most schools are perceived as working from a deficit theory, 'autism is a problem'.

Parents seek responses that indicate a school or teacher values their child for who they are and the strengths they bring. The majority of respondents acknowledged that schools do this for their autistic child regularly or sometimes. Almost half perceived their child's school didn't acknowledge the positives very often or seldom did so. This is concerning as anxiety and low self-esteem are invariably two traits clustered with autism, so our autistic children require additional 'building up'.

Question 9: School attitude towards children on the autistic spectrum

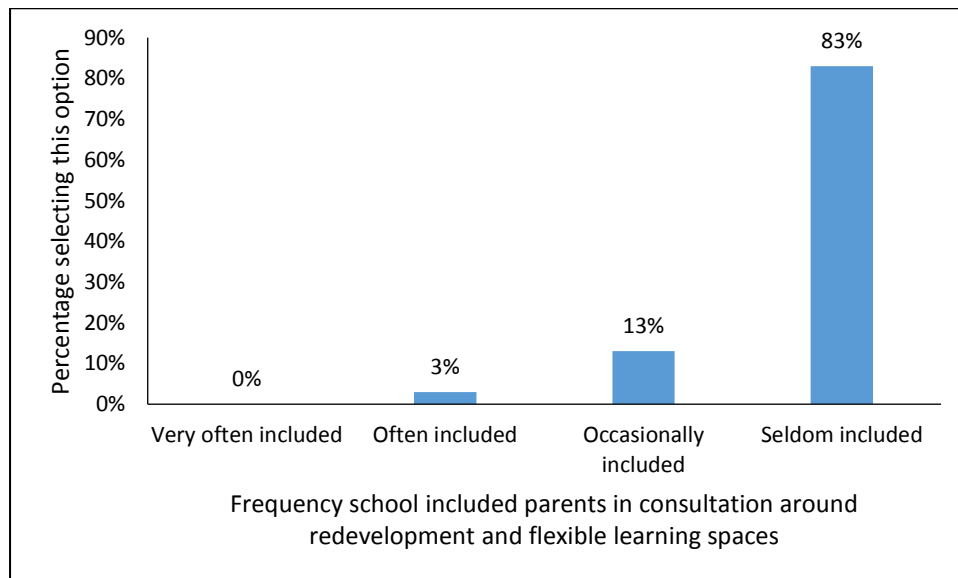


Discussion: 16% of respondents acknowledged that their child's school were very or generally positive towards children with autism. Nearly 60% acknowledged that their school was sometimes positive, but misunderstandings of their child were common. Disturbingly, 24% stated that there was little understanding of their autistic child and their needs. These results are fairly consistent with the results in previous questions and align with results regarding consultation later in this survey.

Question 10: School catering for needs

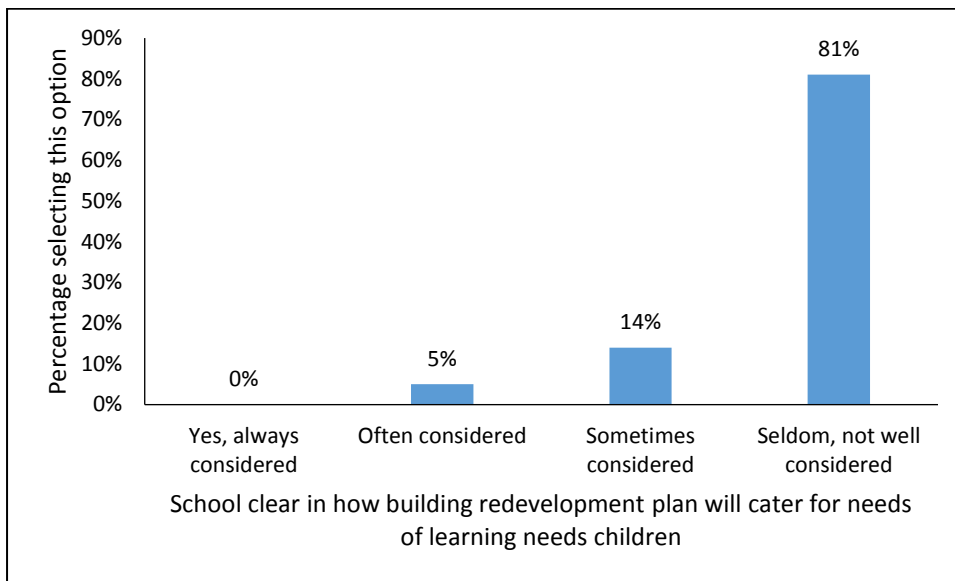
There were 34 respondents to this question. 14 respondents cited that they and their child(ren) with ASD lacked support from the school or support was very inconsistent. 7 responses included specific reference to staff needing more professional learning development around catering for children with ASD. Associated with this a further four commented on inconsistency of knowledge and support for their children between staff and one mentioned lack of leadership support for teachers of ASD children. 7 responses included clear and direct reference to the new learning environments being a significant concern with regard to their child's learning and wellbeing.

Question 11: How has the school included you in consultation around school redevelopment and flexible learning spaces?



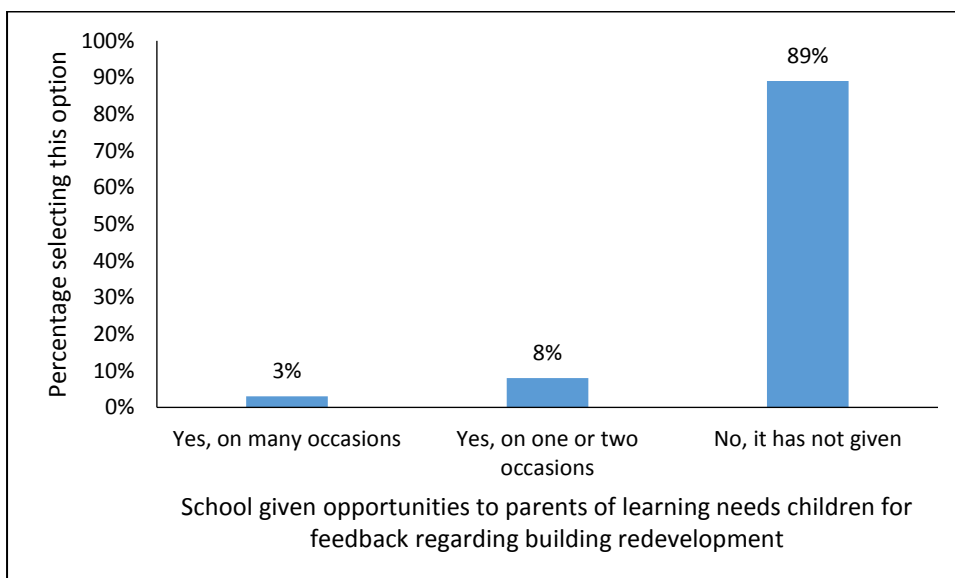
Discussion: This is a very low consultation rate. As autistic children fall within special needs it indicates that consultation rates with parents of priority special needs learners has been poor according to 95% of respondents. The implication is that the knowledge parents carry about their children's particular needs have not been deeply considered by the vast majority of schools in their consultation process. This implies that the consultation processes in the majority of schools was not inclusive of parents with high learning needs children.

Question 12: Has the school been clear in its building redevelopment plan how it will cater for the needs of learning needs children?



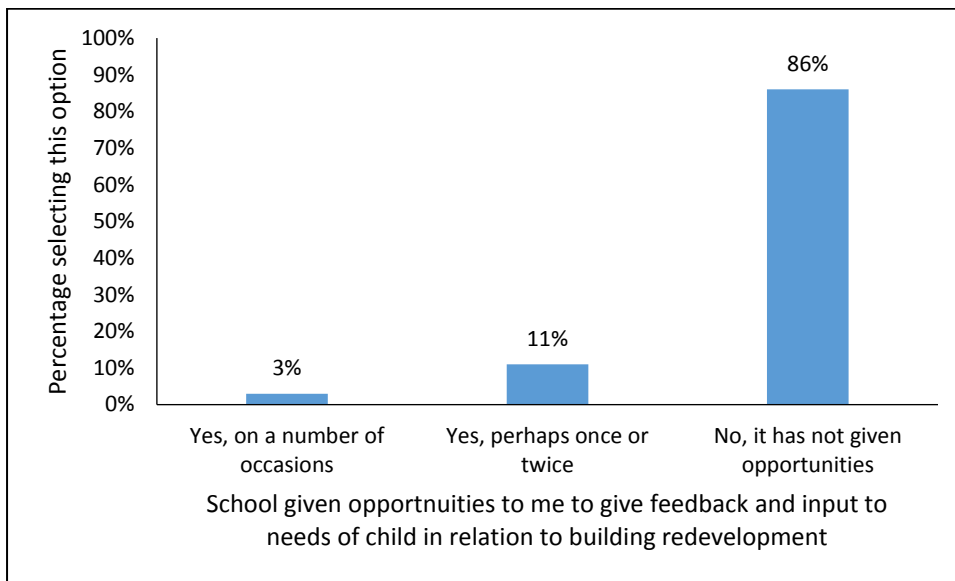
Discussion: Only 5% of respondents considered their child’s school had considered learning needs children often in developing their rebuild plan. This is very low. 81% responded by saying catering for special needs children was not well considered. These are concerning figures and indicate that planning of learning spaces has been considered more generally and not in detail for priority learners. To reduce inequitable outcomes for children priority learners need to be a priority in planning.

Question 13: Has the school specifically given opportunities for feedback from parents of children with special learning needs regarding the building redevelopment?



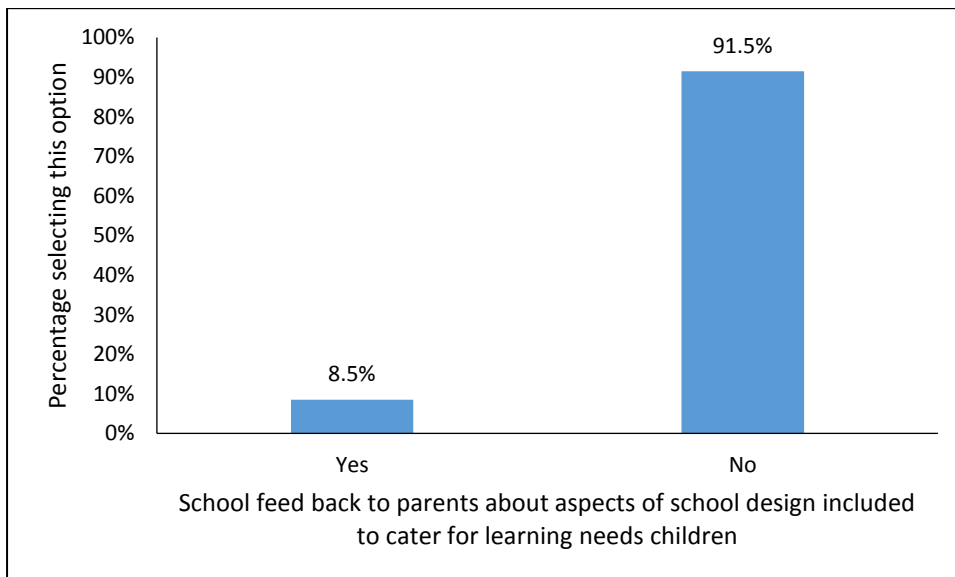
Discussion: These figures, understandably, closely match the responses to Question 12. There is little indication from respondents that schools have been proactively inclusive of whānau with learning needs tamariki in their consultation processes.

Question 14: Has the school has given specific opportunity for me to give feedback and input as to the needs of my child in relation to the school building redevelopment?



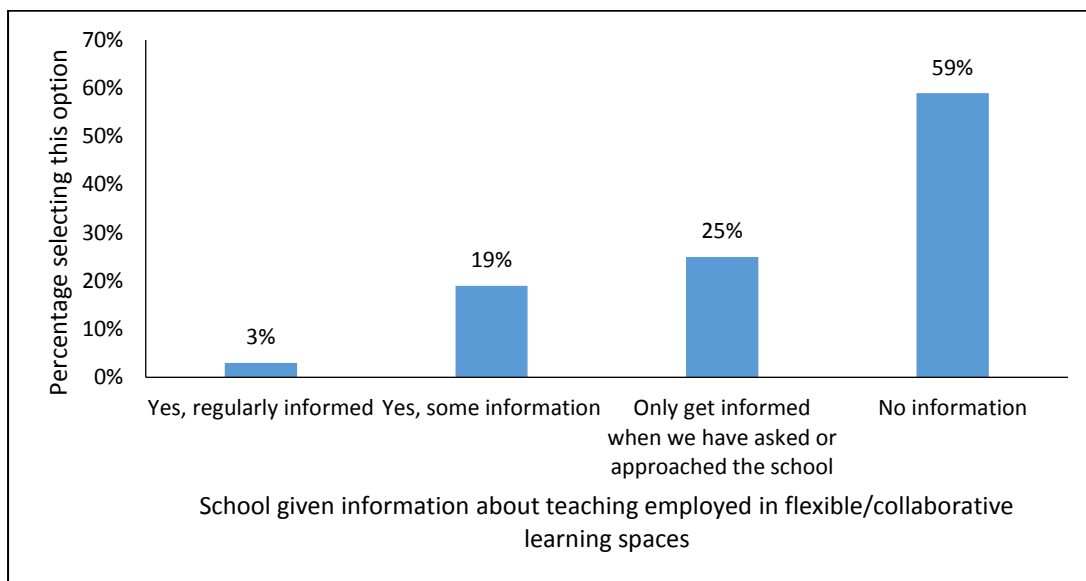
Discussion: Again, when personalising this down to feedback regarding their particular child's needs the statistics closely resemble the responses from the previous two questions. There is a pattern of lack of consultation by schools regarding the learning needs of priority learners in a flexible learning space.

Question 15: Has the school fed back to parents about aspects of school design that will be included to cater for learning needs children including those with autism?



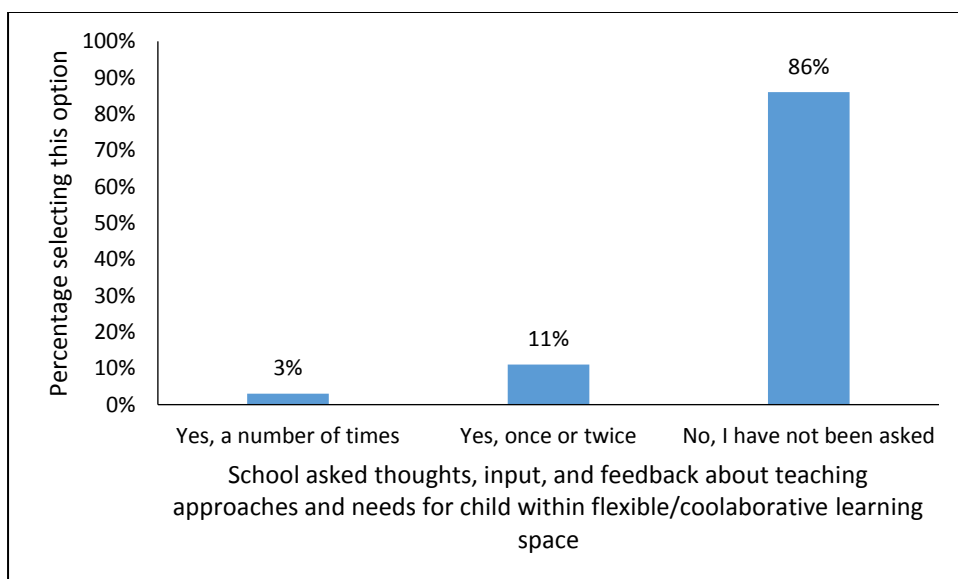
Discussion: Once planning has advanced it appears schools in over 90% of cases have not been proactive in conveying to parents of autistic children how the new design will enhance learning for their children. Schools in 8.5% of cases have fed back to parents about spaces, break-out spaces, acoustics, colour and light, organisation and movement, etc. which all highly impact on the learning of priority learners including children with autism. High anxiety and sensory overload are typical and debilitating consequences of being on the autistic spectrum. Parents particularly seek input and feedback regarding minimisation of such factors in their child's learning environment so that they can learn best.

Question 16: Has the school given information to you about teaching techniques and approaches they will employ in flexible/collaborative learning spaces?



Discussion: 21% of schools have been proactive in giving information to parents around the type of teaching approach (pedagogy) and techniques that teachers have developed and modified for flexible learning spaces. A further 25% gained information when they approached the school and asked what teaching would be like for their child. It is clear that schools need to be more proactive in supplying information about the teaching that will go on inside flexible learning spaces. The approaches taken and organisation through the day are of key concern to the parents of autistic children and all priority learners. Quality practice and pedagogy are keys to quality learning in any learning space so it is imperative that schools are proactive in conveying what will go on inside the space to all parents and in particular to parents of priority learners, including parents of children with autism.

Question 17: Has the school asked you for your thoughts, input and feedback about teaching approaches and needs for your child within a flexible/collaborative learning space?



Discussion: A very large proportion of parents perceived that the school has not asked for their input. This is concerning especially as these children are priority learners and the teaching approaches and daily organisation play a large part in their outcomes. One respondent noted that they had been asked for feedback a number of times. The practice or pedagogy in any learning space is key, knowing your children, especially those with priority learning needs, is vital. Schools need to include regular feedback and input from parents of autistic children.

Question 18: Any general comments you would like to make regarding your child's school approach to consultation and giving you opportunities for input? (individual written comments)

There were 25 comments made. 16 of these comments referred to school consultation being either very poor or that there was no consultation. One commented that the school asked for input only when pushed by parents. A sprinkling of comments were related to schools not understanding ASD children and their needs.

Question 19: My opinion: The positives and negatives of collaborative/flexible learning spaces for my child. These are the most important things to consider for my child at school (individual written comments)

There were 33 comments made. 18 of the responses cited sensory issues as being a key negative aspect of CLEs, noise being the primary concern but movement was also mentioned. Associated with this the next two most common concerns were lack of routine/structure/predictability in an CLE (10) and the need for quiet learning spaces or 'break out' spaces and low sensory environments (7).

These are very important factors to consider in the development of CLEs and mirror the emphasis of research studies undertaken with regard to learning space design for ASD students. The concern from parents is that schools either do not or cannot, due to Ministry of Education budget and design limitations, meet the needs of ASD children with regard to a suitable physical environment in a CLE. Negative responses outweighed positives by 44 to 6, strongly indicating that CLEs are not seen by the large majority of respondents as positive learning environments for ASD students.

The six positive responses included being able to move around and learn in different situations; CLEs work well if set up and 'used' properly; it gave good chances for children to mix; it made it easier to combine classes for learning and activities; the children get more than one teacher; one child was thriving on the excitement of new situations in a CLE.

Question 20: When the school is/was redesigned I believe these things need to be carefully considered for my child:

There were 33 comments made. 24 responses cited the importance of quiet spaces (often called break-out spaces by schools and designers) for ASD students to be able to 'detox' at times to avoid sensory overload. A further 6 commented on the need for low sensory environments for ASD children. 11 respondents commented specifically on the importance of quality teaching in CLEs, especially the need for well-considered structure and routine to give shape to their child's learning. They also mentioned that this quality teaching needed to be developed with CLEs firmly in mind. A further 5 comments related to the need for ASD children to have their own, set learning space. This would benefit their children by improving routines and also being a base for storing and organising possessions. This again related to the need for clear structure and routines for ASD children.

Question 21: From the list of positives identified by parents in schools with larger/flexible learning spaces and newly designed or upgraded buildings, choose up to five you think would be true for your child(ren):

Responses:

- 24 respondents: When one teacher is away there is still a teacher they know there
- 16 respondents: Gives a wider group for my child to strike up friendships with
- 13 respondents: More than one teacher for my child to relate to
- 13 respondents: Can have more choice of things meaningful to them
- 13 respondents: More than one teacher takes ownership of and knows my child
- 12 respondents: Able to work in a wider choice of environments to suit them
- 10 respondents: When it's well organised my child gets more feedback and teacher time
- 9 respondents: Interact with a wider group of kids
- 6 respondents: Helps my child be more flexible in working with others
- 5 respondents: Kids will learn well off other kids, they will co-operate in their learning

Discussion: The greatest advantage seen by respondents was the continuity gained if one teacher is away through having familiar staff still in the learning space. This ties in closely with autistic children generally not responding well to unexpected change, of which teacher absence can be a key aspect.

The second most commonly prioritised aspect was regarding friendships/relationship with peers. Many autistic children find it hard to strike up and retain friendships. Where there is wider choice of friends parents perceive that their autistic child might have more chance of making a positive connection with at least one other child so that they are not isolated. Another concern that often arises as an adjunct to larger numbers of children in bigger spaces is the increased chance of their autistic child being bullied.

The third ranked (equal) was again around relationships, in this case with staff. In a single teacher setting autistic children can sometimes not strike up positive relationships with a teacher; they have no alternative to that teacher in a single cell classroom. If there are a number of staff in a learning space the perception is that a child will have more chance of striking up a positive relationship with one or more of those staff.

This also dovetails with 'more than one teacher takes ownership of my child', the perception being that wider chances for an autistic child to relate to staff will more likely lead to positive interactions and learning advantages.

More choices of things meaningful to them (13) and able to work in a wider choice of environments to suit them (12) are also important. This allows for flexibility for these children and better ability to cope and learn, especially with regard to following passions and reducing sensory overload.

Question 22: The concerns I have with flexible learning spaces and newly designed or upgraded buildings for my child(ren) are (please rank up to five concerns, 1-5, in the boxes)

Responses:

- 30 responses: Too much movement and noise
- 26 responses: Kids with particular needs will 'slip through the cracks' in a bigger group
- 24 responses: No place for my child to have a quiet space when she/he needs it
- 16 responses: Bullying because the naughty kids will get away with more in a bigger group

- 15 responses: The spaces being like a barn with lots of children in them
- 14 responses: My child getting 'lost' in a bigger group because he/she is quiet
- 11 responses: Teachers won't be able to cope with all the wide range of abilities in a bigger group
- 10 responses: My child having to get to know two teachers and more children
- 6 responses: Children will be able to dodge work in a bigger group
- 2 responses: Mixed levels don't work because the older children will dominate

Discussion: Two of the responses rated 1-5 most often were 'Too much movement and noise' (30) and 'No place for my child to have a quiet space' (24). These relate to a concern from parents of priority learners, including those with autism, that sensory distraction and overload in flexible learning spaces will inhibit their child's learning and development. This is a common concern for parents of autistic children. Schools need to include parents in consultation and design to reassure them that autistic children are catered for regarding sensory concerns in any new design.

The second most common concern is 'Kids with particular needs slip through the cracks in a bigger group' (26). Again this is a recurring theme and relates to the pedagogy (teaching) and organisation within the learning space. Parents of autistic children need to be included in discussions around the type of teaching and organisation in the flexible learning space that will enhance learning for autistic children. Much of this good teaching practice and organisation for autistic children will also enhance learning for all children.

There is a significant gap to the next most common response cluster: concerns regarding bullying, lots of kids in one space and children getting lost in a larger group. These concerns relate to autistic children finding social situations in large groups particularly challenging. Bullying or targeting of autistic children is a common occurrence for many. The fear is this will go unnoticed in a in a larger group or teachers will not be so perceptive of their needs because of larger numbers.

It is therefore very important for schools to proactively discuss and outline organisation and routine which minimise issues for autistic children and maximise positive outcomes. Speaking with parents of autistic children about learning space design which incorporates break-out/quiet areas, minimising sensory input, using consistent routines, having excellent sound insulation to minimise sensory overload, use of visual prompts, etc., all indicators of good practice for all priority learners, including children with autism.

Question 23: Ideas I have which I believe would be great to have in the school rebuild/redevelopment for my child are (please rank up to five, 1-5, in the boxes)

Responses:

- 28 responses: Break-out spaces... smaller spaces that individuals or small groups can work in
- 22 responses: A range of learning spaces to cater for learning differences e.g. big/small, group/individual, etc.
- 20 responses: Strong routines and organisation from teachers
- 19 responses: Access to digital tools for learning e.g. computers, other digital devices, robotics, internet for research etc.
- 18 responses: Good acoustics to reduce noise
- 13 responses: Good lighting, natural and additional lighting
- 13 responses: Good areas for art, cooking/baking, science etc. so the kids can experience a wide range of activities

- 11 responses: A range of furniture to allow different ways to work e.g. tables of different heights, comfy seating areas, group areas, some individual desks etc.
- 4 responses: Indoor/outdoor flow
- 4 responses: Keep a big playing field for sport and fitness
- 2 responses: More bicultural aspects through the school, Maori and English e.g. bilingual signs, carvings, designs, whakatauki (sayings), etc.
- 1 response: Plenty of space to put up children's work

Discussion: Break out spaces, a range of learning spaces to cater for needs, strong routines and organisation and good acoustics were all seen as high priority. All of these aspects relate directly to the needs of autistic children with regard to sensory issues and a sense of order. These reflect the knowledge of parents regarding their children's needs and the common thread that autistic children have difficulty filtering extraneous sensory input. Without strong commitment by the school to include sensitive design elements specifically for autistic children then flexible learning spaces may well be detrimental to these children's learning and development.

Access to digital tools was also seen as important. Digital tools are very effective for use of autistic children in their learning. They can be used at times by autistic children as a 'learning cave' in which they can have sensory down time, however they are not a substitute for physical breakout/low sensory spaces.

Question 24: Questions I have and final comments I would like to make regarding including parents/whānau of autistic children in the planning for flexible/collaborative learning spaces:

- There was quite a spread of final comments.
- Four comments were made regarding the vital importance of professional learning development for staff.
- Three each commented on the following: that CLEs catered less for the learning needs of ASD children; schools needed to proactively ask for and listen to parental input with regard to learning space design; that the move to CLEs was at least in part motivated by Ministry of Education attempts to cut costs.

Survey comments to ponder:

Parents knowing their children:

- *I have two boys with autism. They need regular breaks and a settling period with a small project in the morning before class. I find the open plan creates too many transitions and not enough structure. There are no visuals or clear instructions for tasks and so it is easy for them to become chaotic. Noise is a big issue for my kids. It takes 5 mins to find their book, then a pencil, then compete for a spot at a desk. Because you face other kids in a circle shape they get in your face easier. Compared to the individual desk where you could access books, stationery, etc.*
- *My child needs... Carefully scaffolded materials. Opportunity to work individually. Ability to have his own spot within the learning environment. Being able to wear noise cancelling headphones or listening to music. Teachers remembering to check in on him to ensure he is on task.*
- *Our kids deserve a proper education with environments that suit them. Maybe the new spaces will improve things, but I think there is every chance that they will have a negative effect on my child's ability to do his work.*

Parents knowing the teacher:

- *I personally believe that it is truly based on the teacher the child has. We have had an amazing year this year but my son has had two teachers who get him and have put awesome things in place for him. They have a much better understanding of why behaviours happen. They have also been proactive in explaining the reasons why things happen with the other students in his class*

Parents perceiving staff attitudes:

- *There is a deficit view of autism and it is basically viewed as behavioural management rather than education.*

Parents having a voice and staying positive in approach:

- *Having completed this survey I've realised that our school is particularly lacking in this area. I believe the school is a great school however autism doesn't seem to be on their radar. Maybe I will bring more of a voice to this and I'm sure they will embrace it*
- *The parents need to be highly included, there should be an IEP every term to monitor how things are going, what can be improved, what to work on next, keep communication open and clear, LISTEN TO THE PARENTS. If only our last school had, I have a wealth of information...*

Parent perception of the positive possibilities of Flexible Learning Environments:

- *I think collaborative working spaces can be beneficial if used in the right ways. I've seen examples where these kind of class rooms are implemented however they are used like the old school class rooms and this simply doesn't work. When used to their full potential they are great and allow for varied learning. It is critical that there are small low sensory*

breakaway rooms/spaces available for kids to take themselves away when things get overwhelming.

Parent perceptions of place and pedagogy:

- *Space is often 'noisy' both auditory and visually. Personal space is often difficult and a calm place is not existent. Like the idea of working with others but without facilitation for success this is tricky. If the teachers aren't on the same page the atmosphere and consistency suffers.*
- *Visual distractions - when another group is doing something more interesting than his own, he is going to really struggle to stay engaged. Also structure - if the spaces are flexible, it means they are less predictable, and predictability is HUGE for my son. Also - will he always know who is teaching him, and will I? A lot of the best ways to manage my son involve prevention of anxiety. His teacher and I work closely on that, but if there are suddenly a number of adults he might interact with, it will all go wrong very quickly (as it has this past week when he has had four relieving teachers in a single week).*
- *The most negative thing is the lack of understanding re sensory issues.*
- *What training or support do teachers get to work in such a different environment?*
- *What is good practice for one group of students ie ASD is good for any number of other kids whether their different needs have already been identified or whether they have been missed (out).*

3c. Information and perceptions from Professor Tony Attwood:

A very helpful Attwood insight is: *The autism spectrum is a different way of learning not a dysfunctional way of learning.* When viewed in this way thinking around catering for the learning of children with autism can be better understood and planned for. Hans Asperger also made the point that what was good teaching practice for children with autism was also good teaching practice for all children, a sentiment that Attwood echoes.

Attwood also comments that for many autistic children, they could well be better catered for in a specialist school or learning space where teachers and support staff specifically trained in teaching ASD children can more effectively meet the needs of these children. However he goes on to add that the ideal would be all staff with a heart for ASD children; within school excellent support for ASD children by teachers, support staff trained in working with children with autism; back-up expert support... all within a mainstream setting. However, this combination of factors in mainstream schools is not all that common.

Attwood also recognises that with ASD there are usually one or two other diagnoses, a cluster, the most common associated with ASD being high levels of anxiety and stress. ASD children lack the ability to 'read the signs' and predict such things as human emotions, social nuances or being able to extrapolate or read between the lines. Hence anxiety is high in interactions, much energy being expended just trying to 'read the day' or know what to do next. High anxiety leads to high energy output just to survive the day and this, in turn, can often lead to high fatigue and sensory overload. Environmentally this means careful thought must be given to minimising disorder and sensory overload. Good practice for ASD children? Yes, and for all children.

Regarding the environment in which ASD children learn best, Attwood thus stresses the importance of the following:

A well-ordered environment where there are strong elements of predictability. Thus, in a flexible learning space routines and structure are important. This brings into highlight the importance of the pedagogy, planning, knowledge of children (their strengths, needs, passions, worries) and the spaces they are learning in with regard to their daily learning programmes.

The size and arrangement of a learning space is also reflected on by Attwood. He states that large, open learning spaces are best avoided for ASD children. Children on the autism spectrum respond best to cosier learning spaces and spaces that have areas that are more enclosed or on a smaller scale. The provision of 'break-out' spaces and learning 'nooks' becomes an important aspect of any learning space design for ASD children. The idea of ready access for ASD children to a 'cave' in which they can work in a low sensory input zone is well recognised. This is also a need for many other children not considered to be autistic who do not function well for prolonged periods in large, open, high-movement, higher noise spaces.

The choice of a school and community as to what is the ideal size and physical arrangement of learning spaces in a school is therefore an important factor for ASD children and their learning, as well as the learning of many other children sensitive to sensory over-stimulation. An open space with few nooks or 'break-out' spaces available for ASD and other children requiring low sensory input would prove very stressful for these children, thus impacting their learning and those of others around them.

The level of sensory input is another factor Attwood stresses needs to be carefully considered. The vast majority of ASD children have lower thresholds to noise, lighting, colours, textures, smells and tastes than other children. This is also a factor for numerous children not diagnosed as autistic.

Interior spaces need good sound proofing, careful choice of colour, careful thinking around areas of high traffic movement and activity spaces. Care should be taken to have small spaces available away from high movement areas so that a calm, low-sensory environment is available for ASD and other children in need of a sensory 'detox' space. In these areas dominated by bright colours and cluttered display spaces should be avoided, a space set aside for visual prompts and visual timetables be set aside for children who regularly use the space. The ability to increase and reduce both natural and artificial light should also be thought through.

The availability of digital tools is alluded to by Attwood. He recognises the value of digital tools as learning tools, communication tools and as 'digital caves' which ASD children can utilise. Many ASD children and adults can communicate more comfortably via digital tools because the tool reduce the anxiety associated with continual face to face social interaction but still act as a communication interface with others. They are not a substitute for face to face socialisation, they are another platform for learning which autistic children and adults can utilise.

These factors are all important in the consideration of design towards catering for the needs of ASD children. In summary Attwood draws our attention to these key factors regarding flexible learning spaces to:

- be designed to enhance order and organisation e.g. careful consideration of use of spaces, flexibility to open up and close spaces, high traffic areas, etc.
- be considered carefully regarding size of space and provision of 'caves'-low sensory areas
- have colour schemes, display spaces, sound proofing, light, movement considered carefully
- have the availability of digital tools considered carefully

4. Discussion:

a. How proactive schools have been in addressing needs of autistic children?

- Around 80% of respondents did not think the school their child attended catered well for their autistic child.
- 62% of respondents said that their children did not have an adapted programme to meet their needs and that they did not meet with the school to discuss how adaptations could be made to cater for their autistic child.
- 28% of respondents acknowledged they were consulted, informed or asked regularly or most of the time about their autistic child and their learning.
- 16% of schools were often or generally positive about their autistic child.

The pattern of responses from this sample of parents indicates few schools cater well for autistic children by modifying programmes effectively or developing specific programmes tailored to the needs of autistic children. The large majority of schools do not regularly include parent input into the teaching of their autistic child. Few schools were consistently positive about children with autism with most schools giving limited positive feedback to parents.

These figures indicate there is an issue with regard to the perception of children with autism and as a section of our priority learners they have a distinct learning disadvantage because of this. A significant majority of schools covered in this sample were not seen as being proactive in providing for the needs of autistic children and being inclusive of their parents/whānau.

b. The consultation processes (if any) undertaken by their child's school regarding learning spaces

- 83% of respondents perceived that they were seldom consulted with regard to school redevelopment and flexible learning spaces.
- 89% of respondents perceived they had been given no opportunity for feedback to schools regarding the building redevelopment.
- 86% of respondents perceived they had not been consulted regarding the needs of their child.
- 91.5% of respondents had not had any feedback from the school as to how special needs children including those with autism would be catered for in the school's flexible learning spaces.
- 19% of schools were seen to be proactively giving information to parents regarding the teaching approaches that would be employed in flexible learning spaces.
- 86% of parents had not been asked for information or opinion regarding teaching approaches in flexible learning spaces.

These responses indicate the vast majority of schools have not been inclusive of parents of autistic children in the consultation process. This has been so with regard to both learning space design and also the teaching and approaches within these spaces.

The large majority of parents of autistic children have felt excluded from the school redevelopment process and have significant concerns, thoughts and ideas which have not been tapped into by schools. Many feel their voice has not been heard. This has led to a large proportion of parents with autistic children not having positive dispositions towards flexible learning spaces and having high anxiety with regard to learning and social outcomes for their children in these spaces.

c. Thoughts and concerns about collaborative teaching and learning spaces

- The top positive aspects of flexible learning spaces nominated by respondents were: When one teacher is away there is still a teacher they know there (24), Gives a wider group for my child to strike friendships with (16), More than one teacher for my child to relate to, Can have more choice of things meaningful to them, More than one teacher takes ownership of and knows my child (13 each).
- The positives relate to consistency (if a teacher is away, teachers knowing their child), relationships and choice for their child (flexible/adaptable learning).

Parents of autistic children see positives in collaborative learning spaces particularly with more than one teacher knowing their child and the possibility of positive relationships with peers in a larger group. They also perceive that there could well be opportunity for more flexible learning for their child as to how, what and where they learn that could cater for their needs better.

- The most concerning aspects of collaborative learning spaces nominated by respondents were: Too much movement and noise (30), Kids with particular needs will 'slip through the cracks' in a bigger group (26), No place for my child to have a quiet space when she/he needs it (24), Bullying because the naughty kids will get away with more in a bigger group (16), The

spaces being like a barn with lots of children in them (15), My child getting 'lost' in a bigger group because he/she is quiet (14), Teachers won't be able to cope with all the wide range of abilities in a bigger group (11).

- These concerns fell under the following headings: sensory overload, child and their needs being lost in a larger group including transitions from one activity to another, social issues/bullying.

Parents of autistic children perceive a number of concerns for their children. These relate to the issues autistic children have in larger groups of people. This scenario often leads to those with autism behaving by withdrawing or physically reacting. Parents are concerned that this would happen more often in a larger space with more children, movement and noise.

Many of these concerns are due to lack of information, inclusion and meaningful consultation with parents of autistic children. The feedback provided through this survey strongly suggests that the unknown makes any parent uncomfortable, but for parents of autistic children (and by extrapolation all learning needs/priority learners) this is magnified many fold. For most parents of autistic children, the educational experience their children have had has generally not been a positive one.

d. School Education Brief, Redevelopment Budgets, Redevelopment Process

The development of an education brief, a long-term redevelopment vision outlining the school's priorities, needs, resources, cultural focus and aspirations, was a prerequisite to a school redevelopment going ahead. Schools developed these briefs to reflect the unique culture and background to their school and local community. The Ministry of Education strongly emphasised that this education brief developed by each school formed the basis for planning and redevelopment decisions going forward.

Education briefs needed to include strong emphasis on equity of opportunity for learning needs children, including those on the autistic spectrum. These results indicate that the Ministry of Education needs to carefully consider the school education brief and do all it can to help schools realise that brief, including gaining equitable outcomes for learning needs children including those on the autistic spectrum.

Feedback from a number of Christchurch schools indicates that the education brief is often being 'sacrificed' by the Ministry of Education to meet very tight budgetary demands.

To meet a school's education brief and promote equitable outcomes for all children, including priority learners, the Ministry of Education needs to adequately resource schools to:

- Provide a rebuild/redevelopment budget which allows schools to cater well for all children, especially those who are priority learners, with regard to learning space and configuration.
- Provide good levels of equipment and furniture funding to cater for the special needs of priority learners including those on the autistic spectrum.
- Fund schools adequately to upskill and support staff working in flexible learning spaces, both through the prototype phase and the rebuild/redevelopment phase, to deliver best outcomes for our children.
- Continue to proactively support schools and staff professional development around teaching in collaborative learning spaces with particular focus on the teaching of priority learners, including those on the autistic spectrum, after school redevelopment has been completed.

There is growing concern that Ministry of Education school redevelopment funding is not sufficient in many schools to develop collaborative learning spaces which 'deliver' for our priority learners... those identified as having significant learning needs. Limited flexibility of design, small budgets and rushed design processes are leading to a shortfall of provision for priority learners including those on the autistic spectrum.

The internal learning space layout can be greatly enhanced by the careful choice and arrangement of furniture and room dividers. However, the furniture budgetary provision for schools that are not new builds, amalgamated schools or complete rebuilds is very limited thus giving limited flexibility or choice regarding furniture and its creative use within collaborative learning spaces.

There are also indicators through this research that many schools have not strongly incorporated parent input into education briefs and school redevelopment priorities, especially those of learning needs children. There are also indicators through this research that many schools have not strongly incorporated elements into their education briefs, and subsequent planning, designed to explicitly support learning needs children, including those on the autistic spectrum. This seems to stem from a lack of understanding or expertise in schools as to what is required to best meet the needs of these children and the importance of working in partnership with families.

5. Conclusion:

Returning to the quote from Ann de Roek (1997):

Due to the distinct way people with autism perceive their environment and process incoming information they make sense of their world in a unique way.

Laying this alongside the New Zealand Ministry of Education's core:

Our purpose

We shape an education system that delivers equitable and excellent outcomes.

Tā mātou kaupapa

He mea tārai e mātou te mātauranga kia rangatira ai, kia mana taurite ai ōna huanga.

Our Vision - Every New Zealander:

- *Is strong in their national and cultural identity*
- *Aspires for themselves and their children to achieve more*
- *Has the choice and opportunity to be the best they can be*
- *Is an active participant and citizen in creating a strong civil society*
- *Is productive, valued and competitive in the world.*

New Zealand and New Zealanders lead globally.

Tō mātou moemoeā – Ko ngā tāngata katoa o Aotearoa:

- *He pakari i roto i ō rātou ake tuakiritanga, ā-motu, ā-iwi anō*
- *E whai wawata ana mō rātou ake mē ā rātou tamariki kia nui ake ai te whai*
- *E taea ai te whiri, te whai huarahi hoki e tino taumata ai te puta*
- *He tangata takatū, e kirirarau ana ki te whakapakari i te hapori*
- *He tangata whai hua, whai mana, tauwhāinga anō i te ao.*

Ko runga kē a Aotearoa me ōna uri i te ao.

Parents/whānau, school and Ministry of Education need to work as a team to get the best equitable outcomes for our children on the autistic spectrum with regard to school redevelopment to flexible/collaborative learning spaces. Ultimately, we should be using the strength of this triangle of support to maximise positive outcomes for our children to best to assist them to *perceive their environment and process information* so they can *make sense of their world*. We need to embrace and celebrate their *unique way* of learning and develop school environment and culture that supports them to achieve their best and gains more equitable outcomes for our children on the autistic spectrum.

A key central tenet espoused by the Ministry of education is *equitable and excellent outcomes*:

To achieve this for our learning needs children, including our ASD children, means:

- Parents need to be consulted, included and listened to
- Students need to be consulted, included and listened to
- School education briefs prepared for school redevelopments must strongly reflect this consultation/feedback, including catering for the needs of ASD children

- In the school design process the school, architects and Ministry of Education need to carefully consider the needs of ASD children and others with specific learning needs as expressed through the Education Brief and the school's vision
- The Ministry of Education needs to equitably and adequately fund and resource schools to achieve quality outcomes in the provision of learning environments for all children so that they have *the choice and opportunity to be the best they can be*.
- The Ministry of Education needs to draw on research and its own publications to realise in tangible terms for all New Zealand children what they espouse in word.
- Schools and the Ministry of Education need to carefully and strategically professionally grow staff to understand and develop the best possible teaching practice in collaborative learning spaces to meet the needs of all children, including ASD children.

Parents of autistic children need from schools and the Ministry of Education:

- To be understood; schools need to empathise and try to 'stand in their shoes'.
- To hear positive things about their child and know they are valued. Autism brings challenges, but with support and belief the positives of autism can be grasped.
- To be included and listened to... parents of autistic children are generally very sensitive to the needs, moods, strengths and anxieties of their children, they have to be. They have much to contribute to their child's learning success.
- To have all school staff understand that with autism comes high anxiety; both in the autistic child and in their parents/whānau.
- To have teachers for their child and leaders of their school who know about autism and are adaptable and understanding. Staff professional development is a key
- Strong support from teachers and support staff who work with autistic children.
- Schools that understand autism is a condition, not a behaviour.
- Everyone at school to see their child as a unique child, not a problem child.
- A school culture that supports and integrates their child as much as possible... this includes children, staff and wider school community.
- An understanding that the stress and strain that autism can bring at times to whanāu/family impacts siblings; schools need to have an understanding of family dynamics.
- A medal for the hard yards they put in to support their child through the thick and thin of their child's educational experiences; recognise them for their drive and focus for their child.

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