# Together We Can Do It: A Professional Development Project for Regular Teachers' of Children with Autism Spectrum Disorder

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#### **ABSTRACT**

Autism spectrum disorder (ASD) is a specific disability with well defined characteristics that require teachers to utilise specific strategies to cater for the educational needs of children with ASD in the regular classroom. This paper describes an ASD school project that used a multi-faceted teacher professional development programme to train teachers in ASD knowledge and evidence-based teaching and learning strategies. The findings show that the professional development programme was successful for most teachers, with the key factors that contributed to its success acknowledged.

#### **Practice paper**

**Keywords:** Achievement, ASD, evidence-based practice, professional development

#### **INTRODUCTION**

Inclusion is one of the guiding principles of the New Zealand (NZ) Curriculum (Ministry of Education, 2007). While teachers largely concur with the concept of inclusion, agreeing that this means teaching all children (including those with diverse needs) within the regular classroom, they do have concerns, alongside a hesitation in accepting this responsibility. Teachers' concerns include a lack of knowledge and experience as well as the need for continued learning where they are supported and confident within a collaborative environment (Braden, Huai, White & Elliott, 2005; Jenkins & Ornelles, 2009; Pijl, 2010), time constraints and the challenge of addressing the needs of all their students (Horne & Timmons, 2009; Kosko & Wilkins, 2009; Maccini & Gagnon, 2006; Ross-Hill, 2009).

Many professional development programmes are designed to assist teachers to bridge the gap between inclusion and actual classroom practice. International research shows a successful teacher professional development programme: includes the provision for teachers to attend over a long period of time where colleagues can support each other; is linked directly to teacher practice; involves

modelling and problem solving real-life scenarios, and is presented within theoretical frameworks (Darling-Hammond & Richardson, 2009; DeSimone & Parmar, 2006; Kosko & Wilkins, 2009; Timperley, Wilson, Barrar, & Fung, 2007). Ballantyne (2007) explains this type of professional development has a greater degree of success than one-off seminars, courses or conferences which, as 'one hit wonders', are slowly being discredited.

Additionally, teachers' beliefs about their role as teachers of children with diverse needs is a strong predictor of what happens in the classrooms, and professional development is important in the formation of positive teacher attitudes (DeSimone & Parmar, 2006; Kosko & Wilkins, 2009). Specifically, Kosko and Wilkins (2009) found that teachers needed at least eight hours of professional development over a period of three years in order to improve their self-perceived ability to adapt instruction to children with diverse needs.

One group of children with specific educational needs that is increasingly prevalent in regular classrooms are those with Autism Spectrum Disorder (ASD). Recent studies suggest that ASD occurs at a rate of approximately 1:100 people (Waterhouse, 2008). This would suggest any teacher in a regular New Zealand school will, on average, find themselves teaching a student with ASD at least once every four to five years.

ASD is an umbrella term covering specific neurological conditions (Autism, Asperger's Syndrome, and Pervasive Development Disorders-Not Otherwise Specified) that are characterised by difficulties in three areas: (a) communication, (b) social interaction, and (c) restricted and repetitive interests and activities and/or behaviour, often referred to as the triad of impairments. Furthermore people with ASD can experience heightened sensitivity in any of the five senses (Attwood, 2007; Baron-Cohen, 2008; Ministries of Health and Education, 2008). As a result of the increasing numbers of children with ASD entering regular schools, classroom teachers are being asked to provide suitable educational programmes for this

specific group. The current New Zealand ASD Guideline (Ministries of Health and Education, 2008), issued free to every school, recommends specific strategies that take place within natural settings (such as regular classrooms) to assist children with ASD be successfully included with their typically developing peers.

While New Zealand pre-service teacher education programmes and in-service teacher professional development programmes do include content on teaching children with diverse needs, there is little, if any, specific professional development on teaching children with specific disabilities such as ASD (Brownell, Ross, Colón, & McCallum, 2005; Timperley, Wilson, Barrar & Fung, 2007).

Professional development for teachers of children with ASD varies from 'one hit wonders' (e.g. experts conducting workshops) to professional development that is now internationally agreed as effective. 'Tips for Autism' (Ministry of Education, 2009) is a New Zealand ASD specific professional development course available to the team involved in the education of children with ASD (i.e parents, teacher, teacher aide, SENCO, Special Education specialists) which dedicates three days to learning about and developing interventions and plans to support children with ASD (Ministry of Education, 2009). Encouragingly, the evaluation of this course found the tips professional development programme to be of a high quality and to meet requirements outlined in the NZ ASD Guideline (Bevan-Brown, et al., 2011). While extremely valuable, this course is three days, not the long term professional development programme recommended to ensure the inclusion of diverse learners does occur.

## THE ASD PROJECT

In 2008, a Resource Teacher: Learning and Behaviour (RTLB) needs' analysis in a cluster of urban schools showed that rates of children with ASD or ASD-like characteristics referred to the different Special Education Services had increased sharply over a three year period. Due to the need for ongoing and long-term specialised teacher professional development in ASD, a professional development project involving teachers was developed with the goals of improving teachers' ASD knowledge and classroom practice, thus reducing the need for school referrals to Special Education Services. Funding for the ASD project was received through the Ministry of Education (MoE) Enhanced Programme Fund (EPF). The ASD Project began fully in May 2009, when an ASD Advisory Teacher was appointed to lead the professional development project, in close collaboration with a liaison RTLB.

Schools completing the required documentation became the ASD project schools and teachers from six primary schools, two intermediate schools and one high school were offered the professional development.

Jenkins and Yoshimura (2010) advise that teachers should be included in identifying their own needs. Teachers' opinions were sought at the beginning of the project through a self-report questionnaire that obtained baseline data on their attitudes and practices. This was completed during the first staff meeting. Using a 1 to 5 Likert Rating Scale they were asked about including children with ASD, how much they knew about ASD, their knowledge of the triad of impairments, understanding of sensory issues, and use of inclusive strategies. They were also given opportunities to write their thoughts on any item. Asking the same questions at the conclusion of the professional development provided comparative data for the evaluation of the project. In the post-project questionnaire, teachers were also asked how much value the professional development had added. At the second staff meeting the teachers worked in small groups, brainstorming their professional development needs.

Other qualitative data used to evaluate the professional development included classroom observations by the ASD advisory teacher, meeting minutes, the ASD advisory teacher's contact/diary notes, Individual Education Plan (IEP) documentation and parent narratives. Parent information was collected through discussions with them and was noted in their child's file either in diary entries or meeting minutes.

Riley (2008) explains that teachers need varied and overlapping professional development programmes for effective delivery of inclusive services, therefore the professional development approach became multi-faceted. Taking into consideration teacher perceived needs, alongside the RTLB needs' analysis the professional development plan included:

- school staff meetings: the teacher questionnaires and brainstorming informed the content of the staff meetings. In this setting, the ASD advisory teacher shared ASD knowledge and strategies, and teachers were able to support each other and share new practices
- mentoring of individual teachers.
  Here the ASD advisor, in conversation
  with the teacher, could suggest the
  application of new/existing knowledge
  (Ingleby & Hunt, 2008) and appropriate

- classroom practices for a specific child with ASD
- whole cluster meetings, which encouraged networking between schools and sharing of 'expert opinion' from other sources
- two 'Tips for Autism' courses offered by MoE in support of the ASD project
- external one day courses that occurred in the region during the time of the project.

Apart from the first two staff meetings, attendance at the other professional development sessions was voluntary. Voluntary attendance at the professional development programme ensured ethical consent to contribute to, and be a part of, the project was given by the teachers. Furthermore, teachers were more likely to be internally driven, adaptive to changing demands, and committed to a personal improvement in their abilities to teach children with ASD if they chose to attend rather than being compelled to do so (Smith & Tillema, 2001).

#### **Teams**

Staff meetings were an important vehicle for conveying consistent knowledge and strategies to all staff. Meetings of each school's staff built on existing collaborative staff teams in the comfort of their own staffrooms. Table 1 indicates the content of staff meetings available to all nine project schools and the number of schools that attended each meeting.

Table 1
Staff Meetings for Schools

Staff Meeting Title	Schools receiving staff meetings
About the ASD project (2009)	n=9
Transition and Change (2009)	n=9
Classroom Management (2010)	n=5
Socialisation and Bullying (2010)	n=6
Curriculum Adaptation for ASD (2010)	n=6
ASD Behaviour (2010)	n=3

Staff meeting formats were deliberately designed to provide a consistent approach, while the information conveyed was as different as the titles in Table 2 imply. PowerPoints, cooperative learning activities designed to build collaboration

(and modelled cooperative approaches to use in the classroom) (Brown & Thomson, 2000; Johnson & Johnson, 1994) and a sharing of achievements and concerns were all included. This approach concurs with Meirink, Imants, Meijer, and Verloop (2010) who found "individual teacher learning in [these] team contexts both encompassed changes in pedagogical beliefs and classroom practices" (p. 175).

The first two staff meetings in 2009 were compulsory as they imparted initial key information about ASD. Topics for four further staff meetings were then presented to the principal (or delegated person) of each school, along with their staff data. Principals, as leaders in their schools, were expected to have additional knowledge of their teachers' needs. Each principal then chose the 2010 staff meetings they felt best reflected their teachers' needs.

As Timperley, et al. (2007) point out, leaders must be involved and not abdicate their responsibility in order to ensure equitable classrooms and teacher involvement. Meirink, Imants, Meijer and Verloop (2010) add to this stance stating that "it is important for leaders to guarantee the relevance of these topics for their entire teaching staff" (p.178). For those who decided the 2010 staff meetings were unnecessary, the ASD advisory teacher ensured she was in the staffroom regularly during the teacher morning break so teachers could discuss any concerns or ask advice on a more informal basis.

#### Mentoring

All teachers with children in their classrooms who met the ASD project criteria (i.e. were in Years 1-10, had a formal diagnosis of ASD, and did not qualify for additional resourcing from external educational services) were entitled to mentoring from the ASD Advisory Teacher. Teacher mentoring was not compulsory. Some teachers requested regular assistance (considered active); some needed advice occasionally (monitoring), while others did not request any assistance (inactive). Table 2 shows this response rate.

Table 2 *Individual Cases by Service Category* 

	2009	2010
Active	7	12
Monitoring	9	3
Inactive	16	12

The mentoring took many forms and was negotiated with the teacher with the intention that individual mentoring would: a) build on existing knowledge and b) tailor ASD theory and strategies to the individual child with ASD. Mentoring strategies included:

- observations, feedback and feed forward
- modelling of practices
- home/school liaison
- facilitation of IEPs/team meetings etc.
- assistive technology applications
- resource and material sharing, and
- liaison with external agencies.

The mentoring of Special Education Needs Coordinators (SENCO) as teachers and leaders of teachers of students with diverse needs within the school was considered a priority as SENCO should be the first line of guidance for a teacher who required assistance for a child with ASD. The sharing of ASD knowledge with the SENCO was also designed for sustainability by ensuring at least one person in the school could take the teacher to the next step once the project was completed. Mentoring of classroom teachers, was variable from school to school with some choosing to meet weekly, while others chose a time when they needed answers or discussions once a term. SENCO also attended additional in-depth ASD related professional development as a group with the ASD Advisory Teacher.

Under the auspices of mentoring, SENCO and teachers sought the ASD Advisory Teacher's advice on children they thought might have ASD. While the ASD Advisory Teacher made it clear she did not diagnose ASD, eight additional children were observed within their classrooms and discussed with the SENCO and/or teacher. In all cases they were advised as to the next possible steps (e.g. discussion with parents, referral to paediatrician) and teachers were encouraged to put in place inclusive classroom strategies that support children with diverse learning needs.

# **Other Professional Development**

As the project evolved other professional development opportunities on ASD presented themselves including:

 one cluster-wide network meeting – a paediatrician and a child clinical psychologist (considered ASD knowledgeable in their fields) were invited to speak and offer other perspectives. Non-project schools were invited to send representatives

- two 'Tips for Autism' courses (Ministry of Education, 2009) – non-project schools were invited to the second course
- one teacher aide workshop on ASD non-project schools were offered places
- an inaugural parent meeting in the Upper Hutt Cluster – for any parents of children with an ASD
- RTLB Learning Support Fund paid leave (two teachers per school) to attend a seminar presentation by Sue Larkey (Larkey, n.d.)
- individual schools sent representatives to attend a Tony Attwood seminar (Attwood, n.d.)
- Autism NZ National Conference individual teachers chose to attend (Autism New Zealand, 2010).

#### **FINDINGS**

The initial results from the questionnaire and group brainstorm were similar to Kosko and Wilkins (2009) and Maccini and Gagnon (2006) who indicated teachers mostly agreed with inclusion. Severity of ASD, impact on other children and lack of support of the teacher and/or the child with ASD were reasons given for withdrawing the children from the classroom. Many teachers reported knowing people with ASD: either having taught them, been aware of them in the school, or through personal contact. The average rating for the knowledge of ASD, (including the triad of impairments, sensory issues and relevant strategies) was much lower.

At the conclusion of the project the same questionnaire was given with the addition of some 'value added' questions (see Appendix A). Figure 1 shows a comparison of the response ratings for selected questions.

# **Teacher Responses** 4.5 4 3.5 3 1 to 5 Likert Scale 2.5 2 2009 1.5 2010 1 0.5 0 Q.1 **0.8** Q.10 0.9 Q.11 Q.12

Sensory

Issues

Strategies

Figure 1. A Comparison of 2009 (pre)/2010 (post) Teaching Ratings.

Knowledge

Triad

While teacher attitudes towards inclusion did not show any difference, many of the reasons given for withdrawing children did change. Withdrawal from the classroom was now for the benefit of the student with ASD (i.e. when the student needed respite or down time). Encouragingly, all other items showed increases.

Inclusion

The teachers' rating of the added value of the professional development was moderate. Given a couple of schools did not partake in the 2010 staff meetings nor did all teachers choose to be mentored, this is not unexpected, and it could be argued this 'moderate' response was as a direct result of the voluntary nature of the professional development. Interestingly, a number of teachers who had not attended staff meetings, requested more information about ASD and inclusive practices. When asked to identify the most challenging ASD impairments few teachers could do so, while others identified sensory issues as the most challenging.

Findings from the questionnaire and observational data showed the use of inclusive strategies was variable from class to class and from school to school. Table 3 indicates strategies teachers identified they used during the project.

Other strategies (i.e. five point scale, comic strips, computers, literacy techniques, numeracy techniques, pen profiles) only had one or two respondents reporting use of them. Two teachers named a different inclusive strategy from the ones listed, namely IEPs and educating the class about ASD. One teacher reported a lack of knowledge of ASD strategies.

Table 3
Inclusive Practices Used as Identified by Teachers (n=141)

Added Value

Strategy Identified	Number of Respondents
Down time/quiet time/time out	53
Boundaries/routines	49
Visuals	46
Social Studies	28
Rewards	25
Timetables/schedules	19
Interests/strengths-based	17
Social skills	10
No comment/none	12

Observations in the classrooms of those teachers who participated in the mentoring aspect of the professional development (active cases in 2009, n=16; 2010, n=15) showed an increase of use over time of many ASD strategies mentioned in Table 3. Other strategies seen but not mentioned in the questionnaire included appropriate seating arrangements, improved home/school communication, using the child's name first to cue them in, and longer wait times to allow for processing. Teachers who were mentored also

expressed they were now more confident in teaching children with ASD. Significantly, all teachers mentored showed adaptation to the classroom environment, child management and instructional processes. Furthermore, an analysis of the IEPs showed improved focus, which was more relevant to the child with ASD, instead of being a generic document for diverse learners. Transitions between schools and classrooms became part of the IEP process with the transition implementation better defined.

Teachers did identify barriers to implementing strategies, citing time constraints (most common reason) and lack of relevance (e.g. child too old, child did not respond). Given the nature of teaching and the uniqueness of each child's ASD characteristics this was not unexpected.

The ASD advisory teacher's diary notes, along with observations within the school, showed a growing awareness of the impact of ASD on children. Teachers' attitudes did change and they were beginning to question some of the unusual behaviours that were previously described as 'naughty' or attributed to 'bad parenting'. Consequently teachers became more accepting of children with ASD in their classroom, and less likely to make judgements about unusual behaviours. There was reduced confusion of ASD with other neurological conditions, with children less likely to be referred to external Special Education Services. Encouragingly, schools developed a pathway for identifying children with ASD and knew the next steps.

Some parents reported that their children were now calmer both before and after school and showed fewer anxiety-driven behaviours in the home. Parents' anxiety also decreased with many showing more resiliency and understanding when dealing with schools, and taking a more collaborative part in IEP meetings.

#### **DISCUSSION**

The findings of this professional development for teachers were consistent with the current thinking about ongoing teacher learning. By incorporating a team approach with the individual mentoring, alongside one-off workshop/seminars by experts in the ASD field, teachers were given multiple opportunities to gain the knowledge they needed to successfully include children with ASD in their classrooms. The data shows those teachers who attended the majority of professional development opportunities offered made larger gains than those who only had a smattering of the professional development on offer. Change involves something new or unfamiliar and can be uncomfortable. Those teachers who did make changes need to be

congratulated for trying new or different strategies within their classrooms, where a small change could make a positive difference to the learning and anxiety levels of both the child with ASD and their family.

Addressing attitudes towards ASD is a major key to changing teacher practice. By sharing success stories, teachers came to understand that children with ASD had the potential to be productive members of society. This sharing of information alongside successful strategies (within school and across schools) ensured each school was not 'reinventing the wheel'. Fortunately, the RTLB had already established practices for networking with various educators within their cluster including SENCO, first year teachers and specialist teachers. The ASD Advisory Teacher further encouraged this practice, especially with SENCOs, facilitating meetings with an ASD focus. Teachers demonstrated better understanding of ASD behaviours, and they no longer labelled children as 'naughty' but started to question what the cause of inappropriate behaviours was and how this could be addressed.

One specific example of a highly effective change was demonstrated during transition times. Two periods of major transition occurred for children with ASD during the project, defined as a move to a new school or class in the new school year. Comparisons were made between two time points. In 2009 only two SENCOs signalled an awareness of the importance of planning for this process, with many not beginning transitions until mid Term 4, 2009. By 2010 six of the eight SENCOs were aware of the importance of structured transitions and had begun planning in Term 3 without needing reminders to do so. Many children with ASD moving from one school to another, or into a new class in 2011, were now going for more than one visit to the new school or class, usually in Term 4, and again the week before all children returned for the new year.

The professional development had positive effects for other children in the classroom. Teachers indicated some strategies tried were also useful for the majority of the children in their classrooms, and one teacher explained that a couple of inclusive strategies were extremely effective with the boys in his class.

There were staff changes in 2010. Whilst the changes to teachers in the classroom were more easily catered for, changes to key school personnel such as the SENCO and principal did impact on the ASD project in their schools and became crucial to the success of the teacher professional development. The principal, especially, proved to be an essential component. Schools with principals

who took a positive part in all professional development were more likely to have teachers with a positive attitude, who were then willing to engage with the ASD Advisory Teacher and try different strategies. Lack of principal engagement in the project, despite initial interest, relegated the fidelity of the ASD project to 'just another thing to do' in a busy teacher's life. Schools with this 'hands off' leadership approach were more inclined to have teachers who did not participate in staff meetings, and with increased resistance to mentoring.

Relationships between home and school improved. Parents' anxiety decreased with many showing more resiliency and understanding when dealing with schools. With improved teacher understanding and IEP focus, parents became more comfortable working with the teachers.

There were aspects of the professional development project, upon reflection, that the authors would have changed. This was essentially a teacher professional development project with a focus on children with ASD as the subject. Data could have been collected on student achievement over the period of the project. Also, the children with ASD could have been consulted, in particular they could have been asked if they found any difference in their classrooms as a result of the professional development their teachers received.

Additionally, there were unforeseen factors that impacted on the professional development. A significant external factor was the implementation of 'National Standards' in 2010 which competed with the time needed in some schools to run staff meetings. There were also difficulties getting diagnosis from the health system (a 12 month wait), while internal factors included time for the teachers to engage with, integrate and implement the appropriate strategies.

Upon reflection, this project has raised further questions for the authors:

- Are children with ASD better included following teacher professional development on ASD and inclusive strategies?
- 2. Would a change from voluntary to compulsory attendance with strong principal leadership have had more impact on all teachers?
- 3. Given the ASD project was initially agreed on by schools, but then relegated in importance when another compulsory national initiative was released, how can one initiative maintain its fidelity and importance with teachers in these circumstances?

#### **CONCLUSION**

This teacher professional development programme was successful. Generally, teachers became more knowledgeable about ASD and their attitudes towards children with ASD were more tolerant and accepting: as a result they understood the necessity of using recommended strategies to better include the child with ASD. This is a positive result for the whole cluster. That access to the classroom (inclusion) and the use of appropriate strategies was rated so highly is a reflection of the teachers' response to the professional development. The authors would recommend this multi-faceted professional development approach as an effective way to assist teachers make the changes needed to include children with ASD or any other diverse needs in regular classrooms.

#### **REFERENCES**

- Attwood, T. (2007). *The complete guide to Apserger's syndrome*. London, UK: Jessica Kingsley Publishers.
- Autism New Zealand Inc. (2010). Autism NZ conference 2010 retrieved from www.autismnz. org.nz/Autism-New-Zealand/Conference-2010. php
- Ballantyne, R. (2007). The professional development journey at Hurunui College: A journey towards a professional learning community. *Education Today*(2), 4-6.
- Baron-Cohen, S. (2008). *Autism and Asperger syndrome: The facts*. Oxford, United Kingdom: Oxford University Press.
- Bevan-Brown, J., Bourke, R., Butler, P., Carroll-Lind, J., Mentis, M., & Kearney, A. (2011). Evaluation of the 'tips for autism' professional learning and development programme. Full report. Wellington: Ministry of Education. Available from http://www.educationcounts.govt.nz/publications/special\_education
- Braden, J. P., Huai, N., White, J. L., & Elliott, S. N. (2005). Effective professional development to support inclusive large-scale assessment practices for all children. *Assessment for Effective Intervention*, *31*(63), 63-71.
- Brown, D., & Thomson, C. (2000). Strategies for success in schools: Co-operative learning. Palmerston North: Dunmore Press.
- Brownell, M. T., Ross, D. D., Colón, E. P., & McCallum, C. L. (2005). Critical features of special education teacher preparation: A comparison with general teacher education. *The Journal of Special Education*, *38*(4), 242-252.
- Darling-Hammond, L., & Richardson, N. (2009). Teacher learning: What matters. *Educational Leadership*, 46-53.

- DeSimone, J. R., & Parmar, R. S. (2006). Middle school mathematics teachers' beliefs about inclusion of students with learning disabilities. Learning Disability Research & Practice, 21(2), 98-110.
- Horne, P. E., & Timmons, V. (2009). Making it work: Teachers' perspectives on inclusion. *International Journal of Inclusive Education*, *13*(3), 273-286.
- Ingleby, E., & Hunt, J. (2008). The CPD needs of mentors in post-compulsory initial teacher training in England. *Journal of In-Service Education*, *34*(1), 61-74.
- Jenkins, A., & Yoshimura, J. (2010). Not another inservice! Meeting the special education professional development needs of elementary general educators. *Teaching Exceptional Children*, 42(5), 36-43.
- Jenkins, A., & Ornelles, C. (2009). Determining professional development needs of general educators in teaching students with disabilities in Hawai'i. *Professional Development in Education*, 35(4), 635–654.
- Johnson, R. T., & Johnson, D. W. (1994). *Creativity* and collaborative learning: A practical guide to empowering student and teachers. Baltimore: Paul H Brooks.
- Kosko, K. W., & Wilkins, J. L. M. (2009). General educators' in-service training and their selfperceived ability to adapt instruction for students with IEPs. *Teacher Training and Inclusion*, 33(2), 1-10.
- Larkey, S. (n.d.). Sue Larkey retrieved from www. suelarkey.com.
- Maccini, P., & Gagnon, J. C. (2006). Mathematics instructional practices and assessment accommodations by secondary special and general educators. *Council for Exceptional Children*, 72(2), 217-234.
- Meirink, J. A., Imants, J., Meijer, P. C., & Verloop, N. (2010). Teacher learning and collaboration in innovative teams. *Cambridge Journal of Education*, 40(2), 161-181.
- Ministry of Education (2007). *The New Zealand curriculum*. Wellington: Learning Media.
- Ministry of Education (2009). Tips for AUTISM retrieved from www.inclusive.org.nz/tips
- Ministries of Health and Education (2008). *New Zealand autism spectrum disorder guideline*. Wellington, New Zealand: Ministry of Health.
- Pijl, S. J. (2010). Preparing teachers' for inclusive education: Some reflections from the Netherlands. *Journal of Research in Special Educational Needs*, 10(1), 197-201.
- Riley, K. (2008, Nov 20). Experts: Special, general educators should be cross-trained. *Education Daily*, p. 2.

- Ross-Hill, R. (2009). Teacher attitude towards inclusion practices and special needs students. *Journal of Research in Special Educational Needs*, 9(3), 188-198.
- Smith, K., & Tillema, H. (2001). Long-term influences of portfolios on professional development. Scandinavian Journal of Educational Research, 45(2), 183-203.
- Timperley, H., Wilson, A., Barrar, H., & Fung, I. (2007). Teacher professional learning and development: Best evidence synthesis iteration [BES]. Wellington, New Zealand: Ministry of Education.
- Waterhouse, L. (2008). Autism overflows: Increasing prevalence and proliferating theories. *Neuropsychological Review, 18*, 237-286.

#### **AUTHORS' PROFILES**

## **Raewyn Higginson**



Raewyn Higginson has spent 17 years teaching followed by 12 years working in Special Education as an RTLB, Special Education Advisor and as the ASD Advisory Teacher for the project. She is now currently employed by Te Tari Puna Ora o Aotearoa/ New Zealand Childcare Association as a lecturer in Whakatane. She is continuing her study through the University of Waikato, focusing on the experiences of teachers, parents and children with ASD in the school landscape. Fortunately she loves reading and learning new things. Time with family and friends, pottering in the garden and walking on the beach provide some balance to her life.

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## **Margaret Chatfield**



Margaret Chatfield has been a Resource Teacher of Learning and Behaviour since the start of this service in 1998. During this time she completed her MEd at Victoria University. She has worked extensively in Special Education in primary school settings, supporting students with ASD at individual case level and through upskilling teachers and teacher aides. Margaret has also worked in the tertiary sector with young adult students who had a range of communication and learning difficulties.

In 2009 and 2010 Margaret worked with Raewyn Higginson on the ASD Project in Upper Hutt schools, and also researched and facilitated workshops for Upper Hutt Police on "ASD and Implications for the Criminal Justice System." Margaret's skills and educational strengths in Autism Spectrum Disorder are enhanced by personal experience as a parent of a young man with high functioning autism.

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#### **APPENDIX A**

# **Professional Development Teacher Questionnaire**

♥ Indicates the 'value added' and/or professional development attendance questions.

The ASD project is nearing completion. As part of the project contract a final report needs to be compiled for the MoE on the outcomes of the project. It is important that teachers' voices are heard in this report. Therefore please complete the following survey independently.

You will notice some of the questions are similar to the initial questionnaire – this is to ensure there is data that can be compared. Other questions have been added to ascertain your opinions.

Please be assured that any information you give will be compiled and your contribution will remain confidential.

School: Date:					
Position:	Teacher	Management Te	eam		
	Other (pl	ease specify)			-
1. Should	students wi	th ASD be included	into regular classrooms?		
1		2	3	4	5
No inc They sho specia	uld be in	A little but mostly withdrawn	Sometimes	Mostly included in the class	Total inclusion in the class. No withdrawa
Please expl	lain further:				
	you think ch	ildren with ASD in y	your school are better ab	le to access the curricu	lum in their regular
1	l	2	3	4	5
Do not	t know	No	Sometimes	Frequently	All the time
How do yo	ou know (if c	circled 2-5)?			
3. ♥ Plea	se circle the	ASD staff meetings	you attended.		
About	About ASD and the Project		Transitions and Changes		
Curriculum Adaptation		Classroom Management			
Social	isation and	Bullying	Challenging Behaviour		
4. ♥ Did	you attend	a 'TIPS for Autism' o	course in 2010?	Yes / No	
5. <b>♥</b> Have	e you attend	ed any other profes	sional development on A	SD during the project?	
Yes /	No				
If yes p	lease indica	te which ones:			
	v confident o		aching a child with ASD	now compared with the	e beginning of 2009
1	I	2	3	4	5
No ch	nange	Not at all confider	t Somewhat		Very confident
Please con	nment furthe	r:			

7.	♥ Have you had a	student with ASD in yo	our class in 2009/2010?	Yes /	No	
	(N.B. Please exclu	ude students who receiv	e ORRS funding or SLST	support.)		
	If <b>no</b> please move	e to question 8.				
	If <b>yes</b> please answ	ves please answer the following questions:				
	7a. ♥ How use	ful was the support fron	n the ASD advisor?			
	1	2	3	4	5	
	I received no sup	pport A little	Some	Useful	Most useful	
	If you received n	o support please explair	n why.			
		ceived support what wa le training, IEP facilitatio			ison, classroom strategies, c.	
	7c. ♥ What oth	ner assistance would you	u have liked?			
8.	Please rate your k	nowledge of ASD now.				
	1	2	3	4	5	
	No knowledge	A little knowledge	Some knowledge	Knowledgeable	Very knowledgeable	
9.	♥ How much has	the ASD project added	to your knowledge?			
	1	2	3	4	5	
	No added knowledge	A little added knowledge	Some added knowledge	Mostly added knowledge	Gave me all my knowledge of ASD	
Plea	ase rate your under	standing of the following	g now.			
10.	The 'Triad of Imr	pairments' or characteri	stics that impact on a p	erson with ASD.		
	1	2	3	4	5	
	No knowledge	A little knowledge	Some knowledge	Knowledgeable	Very knowledgeable	
Wh	ich of the characte	eristics do you think has	the biggest impact in the	e classroom and why?		
11.	The sensory diffi	culties pupils with ASD	can experience.			
	1	2	3	4	5	
	No knowledge	A little knowledge	Some knowledge	Knowledgeable	Very knowledgeable	
	Here are some st	trategies that might have	been suggested:			
Social stories Vis			Visual schedules/tim	Visual schedules/timetable		
	Time out/down t	ime cards	Scripts	Scripts		
	Comic strip conversations		Five point scales/escalation charts/arousal cycles			
Social skills programmes/groups Se		Set routines/bounda	Set routines/boundaries			
Quiet spaces/nests		Utilisation of interests/strengths				
	Visual cues/prompts/supports		Motivational/reward charts			
	Specific literacy	advice	Specific numeracy a	dvice		
PEN pictures/profiles						

Which of the sensory issues do you think has the biggest impact in the classroom and why?

12.	♥ How useful have the strategies suggested been to help support students with ASD (some are listed
	above)?

1 2 3 4 5

Not useful at all A little useful Some useful Useful Very useful

List strategies you have tried and place rating beside them (e.g. visuals – 4).

- 13. ♥ What reasons were there for not implementing some strategies?
- 14. ♥ Is there any other training or support you would have liked to receive around ASD during the project?
- 15. ♥ What is the most valuable thing you have received from the ASD project that you would advise the Ministry of Education to continue with?
- 16. ♥ Is there anything else about the ASD project you would like to add?

Thank you for completing this survey.

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