

Bulletin



Autism in Context

LDA Council 2017-18

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Jo Whithear

PUBLICATIONS

Wendy Moore

WEBSITE

Pye Twaddell

CONSULTANTS

Ann Ryan

PROFESSIONAL DEVELOPMENT

Lorraine Hammond

LDA Contacts

CORRESPONDENCE ADDRESS

PO BOX 4013

Box Hill South VIC 3128

Box Hill South VIC 3128

ADMINISTRATION & MEMBERSHIP

Kerrie McMahon ldaquery@bigpond.net.au

GENERAL ENQUIRIES

ldaquery@bigpond.net.au

AUSTRALIAN JOURNAL OF LEARNING

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BULLETIN AND eNEWS EDITOR

Wendy Moore pubs.media@ldaaustralia.org

WEBSITE EDITOR

Pye Twaddell thelearn@bigpond.net.au

LDA MISSION

Learning Difficulties Australia is an association of teachers and other professionals dedicated to assisting students with learning difficulties through effective teaching practices based on scientific research, both in the classroom and through individualised instruction.

THE BULLETIN

The Bulletin is produced by David Wilkins at *Silvereye Learning Resources* with support from the LDA Bulletin team. Members of the team are Wendy Moore, Robyn Wheldall, Pamela Snow, Roslyn Nelson and Molly de Lemos. We welcome the submission of articles from LDA members and others with an interest in learning difficulties for possible inclusion in upcoming editions of this Bulletin.

Please submit articles, correspondence about the Bulletin, or letters for publication to the editor (pubs.media@ldaaustralia.org). For questions about content, deadlines, length or style, please contact the editor. Articles in the Bulletin do not necessarily reflect the opinions nor carry the endorsement of Learning Difficulties Australia. Requests to reprint articles from the Bulletin should be addressed to the editor.

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From the President

Anne Castles

The theme of this issue of the Bulletin is autism. In thinking about this complex condition, my mind can't help but turn to the issue of evidence-based practice, as surely there is no other condition (with the possible exception of dyslexia) that has been subject to so many unsubstantiated claims about treatments and, indeed, outright quackery. A quick Google search brings up a seemingly endless array of diets, supplements, exercise regimes, and brain-training programs – all claiming to alleviate the symptoms of autism, or even cure the condition altogether. A few notable examples: “chelation” therapy, which purports to treat autism by removing heavy metals and minerals from the body; “hyperbaric oxygen therapy”, which involves inhaling pure oxygen in a pressurised chamber; and – a recent flavour of the month in brain-based treatments – “transcranial magnetic stimulation”, in which powerful electromagnetic fields are used to induce tiny electrical currents in the brain.

How can teachers and other professionals working with children with autism possibly navigate their way through all of this material, and differentiate potentially promising treatments from quackery? In an informative and accessible blog post, Oxford University researcher Dorothy Bishop lists a number of “red flags” for treatments – signs that a treatment is likely to be lacking a solid evidence base. Although her focus is dyslexia, most of the red flags apply equally to autism treatments. I encourage you to read the post in full (<http://deevybee.blogspot.com.au/2012/02/neuroscientific-interventions-for.html>), but I thought I'd take the opportunity here to outline a few notable “red flags” that you might like to keep an

eye out for:

Firstly, be wary of treatments that claim to cure anything and everything. Many websites selling non-evidence-based treatments will include long lists of the conditions for which their intervention is effective. For example, Brain Balance Centers (<https://www.brainbalancecenters.com>) claim that their program of treatment can alleviate symptoms of autism, Asperger syndrome, oppositional defiant disorder, dyslexia, dysgraphia, dyscalculia and dyspraxia – among others! As we well know, these conditions are vastly different from each other, in both presentation and underlying cause. Indeed, even within the broad category of a condition such as autism, there is a huge amount of variability in the nature and severity of symptoms. The likelihood that any one intervention will be effective across all of such a wide variety of conditions and presentations is vanishingly small.

Secondly, be alert to the mention of anything “neuro”. Neuroscience is a very exciting research area, producing important new discoveries about the brain and how it works. But researchers in this field would be the first to acknowledge that, in the main, their science is a long way from being at the point where it can be applied to education or to the treatment of cognitive disorders. Claims of a treatment being neuro- or brain-based typically serve little more than a marketing purpose – making an intervention seem more rigorous and “sciency”. Indeed, research from Deena Weisberg and colleagues published in the *Journal of Cognitive Neuroscience* (2008) shows that people judge explanations of a phenomenon containing completely irrelevant neuroscience information to be more satisfying than equally sound explanations without the neuroscience. So, this is another red flag to watch out for.

Finally, beware of quick fixes and overnight cures. The language around non-evidence-based treatments is often to do with “removing the blockage”, or “getting to the root cause of the problem” with the implication that

then normal functioning can immediately be restored. But, even if such fixes were possible, we know that change cannot happen overnight. The learning difficulties associated with conditions such as autism are just that – learning difficulties – and as such they will have affected a child's acquisition of knowledge and skills over an extended period of time. Making up for this will take time and effort, and to suggest otherwise is to make false promises that only add to the pain of vulnerable children and their families.



International autism expert, Peter Vermeulen does not offer quick fixes in this edition of the LDA Bulletin, but he does provide us with important insights into working with students with autism. We also get a peek into some of the research in early detection of autism and into early literacy skills of students with autism being undertaken by the Autism CRC and OTARC (Australia's two world-leading autism research centres). Last but not least, it is very instructive to hear the perspectives of a successful adult with an autism spectrum disorder (ASD) and of the mother of an adult with ASD: they remind us how important it is that educators do not underestimate the abilities of students with autism.

LDA's president, Dr Anne Castles, is Research Chair in the Department of Cognitive Science at Macquarie University. Her research has a particular focus on reading development and developmental dyslexia. Anne is Chair of the NSW Centre for Effective Reading and a steering committee member of the Australian Brain Alliance. Anne has been a member of the LDA Council since 2009.

Council notes

Secretary of Council

Council welcomes Jo Whithear to the role of Secretary of Learning Difficulties Australia. Jo, who runs the Canberra Reading Clinic, has been on Council since 2013. She also has an active role in contributing to the LDA website and Facebook page. Jo has taken on the position of Secretary following Pamela Judge's recent resignation from this role, a position she accepted in 2016. LDA Council thanks Pam for her outstanding service to LDA. Pam will continue as a member of Council for the remainder of her term.

Professional Development

During the first months of 2018, LDA has continued to provide its members and the professional community with high quality professional learning. The session by Dr Anna Bortoli in Melbourne on addressing the needs of students with Autism Spectrum Disorder (ASD) and Attention Deficit Hyperactivity Disorder (ADHD) was valued by attendees. Likewise, the session by Dr Lorraine Hammond and Brooke Wardana in Sydney on the role of explicit instruction in preventing learning difficulties was very well received. Keep an eye on the [LDA website](#) for more exciting professional learning to be held throughout the year.

On May 19th this year, Dr Judi Humberstone, a senior lecturer, psychologist and researcher from Melbourne University, will present on the difficulties students experience in developing mathematical understandings. On 16th June, Jenny Baker will deliver a full day session on writing for 8 to 18 year olds, entitled One sentence at a time: Improving the quality of students' writing, 8-18. Both of these sessions will be presented in Melbourne, and both will be likely to book out quickly. See the [LDA website](#) for details and to book.

LDA Awards

The LDA Awards are designed to recognise outstanding work in the field of learning difficulties. These

Awards are open to both members and non-members of LDA. Individuals may only be nominated for one LDA award in any round. LDA reserves the right not to confer an Award in any of these categories if no suitable nomination is received. The closing date for the 2018 LDA Awards is Friday, 25 May 2018. Submissions can be forwarded by email to ldaquery@bigpond.net.au with the name of the award nomination category in the subject line. For more information about the awards, application processes, and previous winners, visit the [Learning Difficulties Australia website](#).

LDA Mona Tobias Award

Emily Mona Tobias, B.E.M., died in 1980. She was acknowledged for her exceptional skills as a teacher and her devotion to children with learning difficulties and this award commemorates her pioneering work. The Mona Tobias Award is presented in recognition of an outstanding contribution to the field of learning difficulties in Australia. This contribution may be in the area of leadership, research, practice or teacher and community education. Previous recipients of this award include Dr Molly de Lemos AM, Mandy Nayton AOM, and Professor Pamela Snow.

Bruce Wicking Award

Bruce Wicking established the Currajong School in 1974, and was committed to the provision of programs that catered for the individual needs of children with learning difficulties. The funds for this award are provided through the generosity of the Wicking family and their friends in commemoration of Bruce's life and work. The award recognises an individual or organisation for innovative programs or practices relating to the teaching of children with learning difficulties. Previous recipients of this award include Rossbourne School, John Fleming and Chris Eveans.

LDA Tertiary Student Award

The LDA Tertiary Student Award is presented in recognition of academic excellence and significant research that advances the understanding of

theoretical and practical issues in the field of learning difficulties, carried out by a student in the course of their tertiary level studies. The Award is based on the submission of a research article, which will be considered for publication in the Australian Journal of Learning Difficulties. Previous recipients of this award include Dr Jennifer Buckingham and Dr Danielle Collenbrander.

Rosemary Carter Award

From 2018, LDA will make an annual award known as the Rosemary Carter Award. The award commemorates Rosemary's enormous contribution to the organisation that we now know as LDA, her commitment to the education of young, struggling students, and the wise and valuable support that she provided to parents and her colleagues over many decades. The award will be for an outstanding consultant who has contributed to the field of learning difficulties through their work with students, through their advocacy for students and their families, and through education of the wider community. An important criterion will be demonstrable efforts to address equity issues by making their services more accessible to disadvantaged families. The award is open to all current consultant members of LDA. For updated information about the criteria for this award, please see the [LDA website](#).

AJLD awards

The AJLD Eminent Researcher Award and the AJLD Early Career Researcher Award are funded by Taylor and Francis, publishers of the Australian Journal of Learning Difficulties (AJLD). These awards are designed to recognise significant contributions to research and to encourage submissions of high quality research papers to the Journal. The awards are decided by the journal editor, in consultation with the editorial board.

AJLD Eminent Researcher Award

This award is designed to recognise significant contributions by eminent researchers in the field of learning difficulties and will be awarded by invitation. The editors of the Journal will

approach worthy eminent researchers, inviting them to submit an article. The prize of \$500 will be awarded upon receipt from the researcher of a paper appropriate for publication in the Journal. Previous recipients of this award include Professor Maryanne Wolf, Dr Louisa Moats and Distinguished Professor Anne Castles.

AJLD Early Career Researcher Award

This award will be decided by open competition based on the submission of a paper appropriate for publication in the Australian Journal of Learning Difficulties. Researchers eligible to receive this award will have completed their PhD within the last six years, and will be currently engaged in research that has the potential to make a significant contribution to theory or practice in the learning difficulties area. The paper to be considered for publication should be submitted to ldaquery@bigpond.net.au by Friday, 25 May 2018. All papers submitted for this award will be considered for publication in the Journal. Previous recipients of this award include Dr Tanya Serry. For more information about the awards, application processes, and previous winners, visit the [LDA website](#).

News from the Website

The LDA website provides members and those interested in supporting students with learning difficulties with a treasure trove of information. Some new functionality has been added to the website recently.

New services for specialist teacher consultant tutors

LDA specialist teacher consultant tutors can now join LDA and renew their membership online. They are also able to update their individual tutor online profiles by tabling their cumulative PD, which can then be transferred to their annual consultant member renewal applications. The option for consultants to offer instruction by Skype has been added. The geographic Online Tutor Search (OTS) search area has been extended to 150km surrounding users' search requests, and the OTS system is now geared with national postcodes.

LDA Specialist teacher consultant tutors now have, for the first time, LDA membership cards identifying them as endorsed LDA teacher consultants, to be renewed annually. There is also a dedicated LDA consultant brochure so

that consultants can provide information about the services they provide and what it means to be endorsed by LDA.

LDA Bookshop Relunched

The new, revitalised, LDA Bookshop is being launched in May 2018 and will be accessed from the [LDA website](#).

The online bookshop features a fresh new design, easy navigation, and a wider selection of resources. It will be actively curated to ensure relevant new titles are available to members and that titles in areas of topical interest are available to LDA members and visitors.

The bookshop features a carefully chosen selection of books primarily in the areas of Response to Intervention (RTI), Explicit and Direct Instruction, Assessment for Instruction, Literacy and Numeracy. The bookshop's focus is on offering books founded on evidence-based research, that bridge the gap between research and practical teaching resources for school administrators, classroom teachers, school support staff, and those who teach individual students.

This exciting new resource can be accessed from the LDA Bookshop link on the home page of the LDA website.

Autism Spectrum Disorder and Executive Functioning Skills

Many students on the autism spectrum have cognitive skills in the average range but research indicates that children on the autism spectrum generally show deficits in executive functioning.

What is Autism?

Autism is a developmental condition that affects the way a person communicates and interacts with other people and his or her environment. The differences seen in people on the autism spectrum include social communication difficulties, strong interests and repetitive behaviour. People on the autism spectrum can also have an intellectual disability and/

or language disorders. These differences and difficulties vary from one person to another: some young people on the autism spectrum require a great deal of support across all areas, while others will require a lower level of focused support to cope in everyday settings.

Research suggests around one in 100 Australians are on the autism spectrum. It is diagnosed more in boys than girls. The impacts of autism can often be minimised by early diagnosis and, with appropriate intervention, many people on the autism spectrum show marked improvements across their school years and into adulthood.

What are some of the characteristics of autism?

Students on the autism spectrum often have problems with communication skills, social situations, behaviour, coping with their environment and learning. Students on the spectrum may:

- Have problems understanding others, talking about their own feelings, following instructions, or maintaining a conversation.

- Like to play alone or may have problems making and keeping friends. They may not know how to join in a game or activity with others so they find social situations difficult.
- Have problems adapting to different situations and environments. They may dislike change, have a strong interest in one topic or repeat actions or movements over and over again.
- Have problems coping with noise, touch, certain smells, certain tastes, movement or people and objects around them.
- Find learning difficult at times due to problems with attention and concentration, planning and organisation, understanding what is expected and staying motivated.

It is important to remember that people on the autism spectrum have their own unique strengths and skills. With regular, consistent support, these strengths can be supported and progress can be made.

Learning issues

Many students on the autism spectrum have cognitive skills in the average range. Parents and teachers, however, are aware that students on the autism spectrum are not always able to access the curriculum as well as their peers without autism. For many students, difficulties in understanding the content, participating appropriately and achieving educational outcomes are not directly related to cognitive difficulties. A teacher's understanding of the characteristics of autism and their impact on learning and engagement has implications for the educational outcomes of school-aged students on the autism spectrum.

Difficulties with executive functioning

Broadly speaking, executive functions are a set of cognitive skills that are used



for planning and carrying out tasks and for organising and regulating behaviour over time. Most researchers in this area agree that important elements include:

- working memory
- mental flexibility
- inhibition
- attention
- planning and organisation
- self monitoring

These skills allow us to make plans, keep track of time and finish work on time, cope with distractions, evaluate ideas, ask for help when needed, take turns in games and conversations, and to stop ourselves from over reacting to minor situations. In addition, our executive functions help us to focus on multiple streams of information, check for errors, make decisions and revise plans given new information (CDC, 2011). Successful use of these skills allow students to participate successfully at school and manage their own behaviour and are crucial in developing and maintaining social interactions.

Executive functioning difficulties might not be obvious in early childhood or during the early years of school, but may become more problematic in upper primary and high school when teachers are less likely to provide scaffolds and structure for students throughout the day.

Executive functioning and ASD

While research indicates that children on the autism spectrum generally show deficits in executive functioning, it is not yet agreed which elements are most impaired and whether these impairments apply to all children on the spectrum. Some researchers have found that children on the spectrum show poorer performance than typically developing children and those with ADHD on measures of inhibition, working memory and flexibility (Corbett et al., 2009). Others have found difficulties with inhibition and flexibility, as well as with planning and verbal fluency (Geurts et al., 2004) but better skills in working memory. Happe et al. (2006) suggest inhibition is relatively strong in children on the spectrum, but that they showed more difficulty in monitoring tasks.

It is likely that there may be no common executive functioning impairment across all people on the spectrum (White et al., 2009); rather, it is possible that a range of executive functioning deficits

contribute more generally to some of the functional, academic and social difficulties experienced by children on the spectrum.

Some of the difficulties related to executive functioning that may be seen in children on the autism spectrum include:

- difficulties with flexibility – it is possible that observed difficulties coping with changes, as well as the tendency for repetitive behaviour, may be strongly related to cognitive flexibility problems
- planning – many students on the autism spectrum need help to break tasks down into sections, understand the order of tasks and how to start and finish tasks
- working memory – while some students show strong visual memory skills, others may show poor working memory skills and struggle to remember longer instructions and other difficulties which can impact on learning
- inhibition – for some students, difficulties with inhibition mean that they may struggle to take turns appropriately, wait for information before starting a task or have difficulty managing their own behaviour

Such executive functioning difficulties are a barrier to accessing the curriculum because students may struggle to finish work on time, cope with distractions, ask for help, take turns, and react appropriately to minor situations. This can result in children on the autism spectrum finding everyday life at school extremely challenging, both within the classroom and in the playground.

What strategies are helpful?

There are a range of strategies that are used to support children with executive functioning difficulties. It is important that they match the individual needs of the child.

Visual supports may be helpful for some children. Visual supports can be used to:

- support change and transitions,
- making steps in a tasks easy to follow, and
- help manage emotions.

Practical strategies can also be helpful, such as:

- breaking tasks into smaller steps,
- providing scaffolding for writing tasks-story maps etc.,
- using timers,
- planned breaks, and rewards.

References:

- Fact sheet: [What is autism?. Positive Partnerships](http://www.positivepartnerships.com.au). Retrieved from <http://www.positivepartnerships.com.au>
- Fact sheet 16: executive functioning. *Positive Partnerships*. Retrieved from <http://www.positivepartnerships.com.au>
- Corbett, B.A., Constantine, L.J., Hendren, R., Rocke, D. & Ozonoff, S. (2009). Examining executive functioning in children with autism spectrum disorder, attention deficit hyperactivity disorder and typical development. *Psychiatry Research*, 166 (2 – 3), 210 – 222.
- Geurts, H.M. Verte, S., Oosterlaan, J. Roeyers, H. & Sergeant, J.A. (2004). How specific are executive functioning deficits in attention deficit hyperactivity disorder and autism? *Journal of Child Psychology and Psychiatry*, 45(4), 836–854.
- Happe, F., Booth, R., Charlton, R. & Hughes, C. (2006). Executive function deficits in autism spectrum disorders and attention-deficit/hyperactivity disorder: Examining profiles across domains and ages. *Brain and Cognition*, 61(1), 25-39.
- White, S.J, Burgess, P.W. & Hill, E.L. (2009). Impairments on “Open-Ended” Executive Function Tests in Autism. *Autism Research*, 2,138-147.

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Autism: From Mind Blindness to Context Blindness

Social competence requires more than social skills; it demands contextual sensitivity which is difficult for people with autism spectrum disorders, writes **Peter Vermeulen**



Introduction

What makes social interaction so difficult for people with autism spectrum disorders (ASD)? Traditionally, we have attributed it to both brain physiology (different “wiring” of the brain) and social skill/social understanding challenges, often referred to as impaired perspective taking or “theory of mind” (ToM). We use the term “mind blind” with this population and assume it is this mind blindness that makes it difficult for individuals to relate to others. However, recent research on the social abilities of people with ASD is suggesting that mind blindness is but one piece of the intriguing puzzle about how individuals with ASD think and process the social world around them.

The idea that people with ASD lack social skills and social cognition is based on years-old studies involving younger subjects with autism who also had lower cognitive abilities. Today we are beginning to recognise that ToM correlates significantly with IQ, especially verbal IQ, meaning that today’s growing population of higher functioning people on the spectrum may not be accurately represented. Recent studies with more able adults with high functioning autism or Asperger’s Syndrome have shown that their social cognitive abilities are far better than we used to think. This research suggests that a shift in thinking may be needed. Specifically, there is a difference in the social potential (social cognitive ability) of people with ASD and their social performance (mind reading in real life).

What does this mean on a real-life level? This new research suggests there is some other key piece of the social cognitive puzzle we have not yet explored. That key piece is context.

Perform Well on Tests, But Not in Real Life

We generally base treatment strategies on research. Yet, research alone doesn’t accurately portray “real life” when ASD is involved. For instance, more able people with ASD perform rather well on tests for emotion recognition. They can learn to read faces, and they do well on even more advanced tests of ToM such as “reading the mind in the eyes.” Yet in real life we see these same bright individuals struggle with social issues that neurotypical people seem to handle effortlessly. How can we reconcile these conflicting findings?

To answer this question let’s first look at the differences between

research-test environments and real-life situations.

Laboratory/ Research Tests	Real life
Off-line (artificial environment)	On-line (natural environment)
Decontextualized situation	Context-driven situation
Cued	Spontaneous
Rather slow: time to think	In the moment: little time to think
Conscious cognition	Unconscious cognition Fast intuition

The differences are significant. Proper research requires that the stimuli and tasks used in laboratories be “pure,” meaning they are controllable, replicable, and therefore stripped from all confounding variables. While this is good for research, the controlled nature of such research makes any findings an abstraction of what happens in real life, and explains why a person with ASD may perform well on ToM tests but still struggle with real-life social situations. Real life is fluid; our social actions and reactions are dependent on a host of variables that can change at a moment’s notice. Test materials for assessing social knowledge and social skills are decontextualised; they do not accurately assess social competency skills as they play out in real life. We must, therefore, use care when using these findings as a basis for treatment or services.

Contextual Processing

What is a nice birthday present for a good friend?

What do you do when the bell rings?

What do you put in your suitcase when you go traveling?

No doubt you can answer each of these questions. But what if you were asked to give the one and only correct answer? You would probably reply: “It all depends....” A nice birthday present for one of your friends could be quite inappropriate for another. The bell may be a signal to remove the cake from the oven, go to your next class, or exit a building because of fire. What you pack in your suitcase depends on the destination and length of your journey. A “correct” answer for all of these questions depends on the situation, and another word for situation is context.

The human brain, through its evolution, has learned to interpret situations by taking context into account. These basic processes occur within the first 50–400 milliseconds in the

unconscious phases of information processing. For instance neurotypical brains use the contextual information coming from the shadow of an object to quickly recognise that object. Studies using ERPs (event-related potentials) indicate many of these early, unconscious brain processes are affected in individuals with ASD.

On a conscious level context helps us think through how we should react and what choices, such as a birthday gift or a response, we should make. Context gives meaning to the stimuli our brains receive.

In the last two decades, research in a variety of disciplines, from philosophy to psychology to computer science, has revealed surprising and remarkable facts about the role of context in several aspects of human functioning. We now appreciate that a good sense of context contributes significantly to our adaptability and survival skills. Furthermore, contextual sensitivity plays out in different arenas, from sensory issues to language/communication to social skills. When we see someone raise his hand, it could mean the person wants to say something, is waving goodbye, or wants to stop a taxi. To cope with these ever changing meanings, the human brain developed a remarkable ability, contextual sensitivity, to unravel the inherent ambiguity of stimuli and respond appropriately to it.

A “correct” answer for all of these questions depends on the situation, and another word for situation is context.

Autism as Context Blindness

Research into the role of context in human information processing has revealed that contextual sensitivity is crucial in exactly those areas known to be affected in autism: social interaction, communication, and flexibility in thoughts and behaviour. This has led to the hypothesis of context blindness as the common pathway in the cognitive deficits in autism. Interestingly, lack of contextual sensitivity can account for many of the cognitive assets in autism such as the ability to think logically without being disturbed by contextual elements (e.g., emotions).

Context blindness refers to a reduced spontaneous use of context

when giving meaning to a stimulus. To put it more simply: the autistic brain thinks in an absolute way, rather than a relative, contextually defined way. Remember the scene in the movie, *Rainman*, where Raymond is trying to cross a street? In Raymond's mind when the sign displays "Don't walk," it means only one thing: "Don't walk." We laugh when the sign changes from "Walk" to "Don't walk" and Raymond stops in the middle of the intersection. Raymond does not understand that "Don't walk" means many different things, depending on the situation or context. When you're halfway through the crossing, it means "hurry up" instead!

We laugh when the sign changes from "Walk" to "Don't walk" and Raymond stops in the middle of the intersection.

Here is another example of context blindness: When the doorbell rang, the mother of a seven-year-old boy with autism asked him to open the door. He opened the back door instead of the front. His reaction was logical, but his choice of door was out of context.

Contextual Sensitivity in Social Cognition

Emotion recognition training is immensely popular in the field of autism. Typical materials used in this training are photographs or pictures of facial expressions of emotions (see Figure 1).

Although these materials can help children with autism learn about different emotions in a rote manner, they do not reflect emotion recognition as it happens in real life.



Figure 2. You don't need to see the face to understand how this man feels.

First, we rarely see faces out of context in real life. When we try to figure out what a person feels, we look at context as much as we do facial expression: the situation, what that person says, body language, our past experiences with similar situations, etc. In fact we don't even need a facial expression to recognise emotions. Even without a facial expression you certainly know how the man in the photo above feels (Figure 2), based on the context.

Studies on how people process facial expressions have shown that when we look at faces, our brains always spontaneously encode the context and that in certain instances, context plays an even bigger role in emotion recognition than the facial expression.

The second problem with traditional emotion recognition training is the underlying assumption that there is a direct relationship between an emotion and its facial expression. This assumption goes back to Darwin's idea of universal expression of emotions in which each emotion has its own distinct facial expression. Unfortunately for people with autism, facial expressions are not that straightforward and quite often are ambiguous. Take tears for instance. What do people feel when you see tears on their cheeks? It could mean sadness. But it could also mean happiness or pride. Or it could just be an allergic reaction or the result of dicing an onion. How can a brain tell the difference? It uses context.

In recognising emotions—the same is true for all mental states—the human brain relies on context. When people

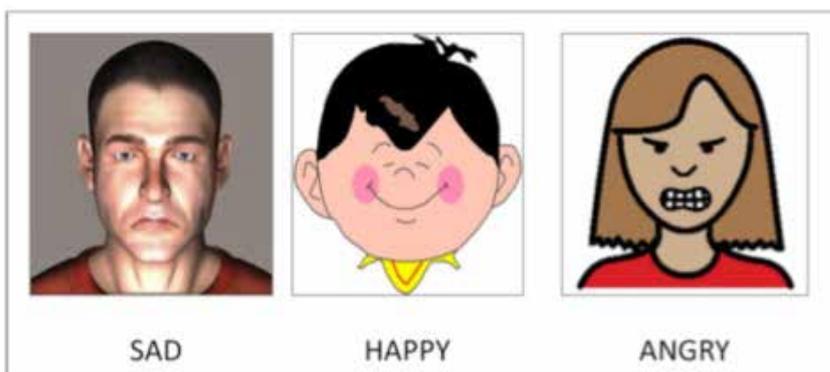


Figure 1. Pictures of facial expressions of emotions are frequently used to teach autistic students but they do not reflect emotion recognition as it happens in real life.

with autism find it hard to empathise, it is because their brain lacks contextual sensitivity. They are affected by context blindness, rather than mind blindness.

Teach Contextual Sensitivity

We can teach people with ASD a lot of rules and scripts, but for social understanding and competence to flourish, scripts and rules are insufficient. To effectively teach emotion recognition and social understanding to people with ASD, we must add context to the materials we teach. Even using a term such as “socially appropriate behaviour” becomes misleading unless context is specified; behaviour that is socially appropriate in one situation might be inappropriate in another context!

Instead of creating stories about certain social skills, we should build social stories about contexts and introduce sentences that start with if and when.

Social competence is not about knowing whether a certain behaviour is socially appropriate or not, it is the knowledge of when that behaviour is appropriate and when it is not. Research has shown that more able people with ASD know quite a lot of social rules, but they have difficulty adapting these rules to changing contexts or making exceptions to the rules. Most social skill training programs focus on teaching generic social skills (e.g., how to start a conversation). However, having a conversation while waiting in the dentist’s waiting room or visiting someone at the hospital is quite different from the conversation you have hanging out with a group of buddies because the contexts are very different.

Instead of putting our focus on teaching social skills, we should focus on teaching social contexts such as visiting someone at the hospital or hanging out with friends. And then teach all the necessary rules, conversation, and behaviour attached to a certain context. When you visit someone who is ill and in the hospital: What kind of present do you take? How long do you stay? What do you talk about? What should you say/not say?

The same logic about context applies to social stories, a powerful

tool to help people with autism navigate the social world. Instead of creating stories about certain social skills, we should build social stories about contexts and introduce sentences that start with if and when. In this manner a story can be adapted to different contexts. For instance a social story about welcoming guests to your birthday party could contain the following contextual sentences:

When the person who arrives is a close family member, you kiss them and say “hi.”

When the person who arrives is not a close family member, you shake hands and say “hi.”

Social competence requires more than social skills; it demands contextual sensitivity— something difficult for people with ASD. Training programs designed to help people with ASD navigate the social world should therefore emphasise social contexts, not just focus on teaching social skills.

Peter Vermeulen, PhD, is co-director of Autisme Centraal, a training and education centre for autism spectrum disorders in Gent, Belgium. He has written 20 books on autism, some of which have been translated into several languages. Peter is an internationally respected lecturer/trainer. He was a keynote speaker at the 2017 Asia Pacific Autism Conference in Sydney and ran a series of training days for several hundred teachers in Australia in February 2018.

For more information visit <http://www.autismecentraal.com/public/standaard-k.asp?lang=NL&pid=213>

What can teachers do: the perspective of a person with autism

Teachers need to be wary of labels and to understand differences in the way autistic people learn says **Jeanette Purkis**. In this interview with **David Wilkins**, she provides an insider's perspective.



Jeanette Purkis

Tell us a bit about yourself and your work in the autism community.

I am 43 years old and autistic. When I went to school there was no Aspergers diagnosis. This meant I had a very confused sense of my own identity, along with lots of bullying. I had a very difficult life in my twenties but made some fairly drastic changes in direction. I am now a many-times published author, advocate, public speaker and mentor. I am driven to make a difference for autistic people, especially kids and teens. My passionate interest is autism advocacy. I have a wide reach in the autism community and beyond and am very active on social media. I also work four days a week in the Australian Public Service in a middle management role. I have been in the public service since 2007 and have always loved my work.

What was school like for you?

School was odd. I was exceptionally academic and never studied for an exam all through school but got straight 'A's. However, I was quite noticeably different which meant bullies made a beeline for me. I had a very traumatic high school experience. While I loved doing well

academically I hated school. As I grew older, there were what I would now understand as signs of unsuccessfully trying to work through trauma. I became very rebellious and joined a revolutionary socialist group. I think I wanted someone to take me aside and ask if I was OK, because I really wasn't.

What would you have liked your school to have done differently?

The one practical thing that school could have done very easily which would have made a huge difference for me and many other kids would have been to have a supervised place to go to at lunch time and recess. We had to stay in the yard on breaks up until year 11 and the school yard was like Lord of the Flies for me.

What do you wish every teacher knew about teaching students with autism?

I think anyone who works with and supports autistic people needs to know these things:

- Assumptions are unhelpful and people aren't stereotypes. Each autistic student is different.
- Focusing largely or solely on deficits

around autism is never a good thing and tends to result in a sort of self-fulfilling prophecy.

- Autistic kids can really benefit from being challenged and stretched.
- A lack of boundaries, or too many inflexible boundaries, are both unhelpful for autistic kids - and all kids actually.
- Autistic and non-autistic communication styles can be very different, leading to misunderstandings. If in doubt of an autistic student's motivations, don't make an assumption. You can ask them why they did the thing. You may well be surprised at how different their motivation is from what you expected.
- Autistic kids have varying levels of needs and preference for social interaction
- Autistic kids grow to be autistic adults. Much as a five year old non-autistic child becomes very different by the time they are 15 or 25 years old, so too does an autistic child.

What do you see as some of the areas for improvement in schools?

Different schools vary considerably. A lot of unhelpful practices are not deliberately excluding but can be very damaging for autistic kids and their families. These include:

- Not listening to parents who express concern about things like bullying or meltdowns and overload. Just because you don't see something at school does not mean it doesn't happen at home. 'Them and us' type situations between school and parents are rarely helpful.
- Dismissing bullying complaints or victim blaming. Telling a parent that their child wouldn't be bullied if 'your son got some resilience' or advising kids complaining of bullying to 'just keep away from them' is a clear example of this. It puts the onus on the person who is being victimised and is invalidating.
- Viewing autistic students based on a label about their level of functioning. What the 'high' and 'low' functioning labels often mean is that the kids seen as 'high functioning' get considerably less assistance, even if they need it and the kids seen as 'low functioning' are seen as incapable and given very low expectations.

Often it is not a lack of intellectual capacity resulting in these difficulties, but one of not responding to the teaching style.

Literacy can be an issue for students with autism. Are there any specific strategies which you think might help with teaching literacy to those on the spectrum?

One of the challenges around teaching literacy - or anything - to autistic students is that they may learn in a different manner to their typically-developing peers. Often it is not a lack of intellectual capacity resulting in these difficulties, but one of not responding to the teaching style. This is an area where educators can benefit from building their understanding of autistic thinking and learning styles. There are some really useful re-sources available. Adele Devine, author, teacher and founder of SENAssist, has written a number of books for educators around building literacy skills for autistic children -

particularly *Literacy for Visual Learners* (Devine, 2015).

Reading accounts by autistic adults on their educational experience can also be helpful.

There is also an issue which can arise where autistic students have other conditions impacting on their ability to acquire and develop literacy. Pioneering autistic author Donna Williams (2005) described autism as being a "fruit salad" of conditions. The most obvious one impacting on literacy is probably dyslexia, but there are other things which may significantly challenge autistic students' literacy. One I have come across in the autism community is Irlen syndrome. This is a visual processing condition that can make the words seem to dance around on the page and significantly hinder literacy skills. I know there is some controversy around the evidence for this condition.

Sometimes the issue is a lack of interest in learning to read and write. Where possible, it can help to link literacy skills with a topic the child is passionate about. 'Special interests' can be an amazing motivator for autistic learners to engage with new skills.

Addressing these sorts of issues can make a big difference around literacy.

What are some strategies which schools can employ to support students with autism to achieve their potential?

One thing which makes a big difference is for schools - and parents - to be aware of interoception and autism. Interoception is the awareness of sensations in the body such as temperature, hunger and satiety, thirst, needing the toilet and awareness of emotions. Autistic people very frequently have very poor interoception which can impact on their mood and behaviour. Imagine if you were really hot and hungry and had to learn and also manage socially in the classroom. Autistic pedagogy expert, Dr Emma Goodall's *Interoception 101* (2016) is invaluable for educators.

Being aware of tendencies for perfectionism and fear of failing is really important too, as is understanding that many autistic kids and adults struggle with the concept that proficiency takes practice. If an autistic child screws up their work and throws it across the room it is likely to be because it wasn't 'perfect' more than because they are intentionally avoiding work. The key to addressing perfectionism often involves adding perspective. It can help to explain to autistic students that they will

probably not be as proficient at the task as the teacher right away and they will need to practice.

A positive and supportive school experience can set up an autistic young person to transitioning well to adult life.

References:

Devine, A. (2015). *Literacy for visual learners: Teaching children with learning differences to read, write, communicate and create*. UK: Jessica Kingsley Publishers

Williams, D. (2005). *The jumbled jigsaw: An insider's approach to the treatment of 'cluster conditions' in the 'autism spectrum' and beyond*. UK: Jessica Kingsley Publishers

Goodall, E. (2016). *Interoception 101*. South Australia: Department for Education and Child Development. <http://web.seru.sa.edu.au/pdfs/Introception.pdf>.

Jeanette Purkis is an autistic advocate, author, blogger and public speaker. Jeanette is the author of several books on elements of autism and has presented at many disability and autism events, including for TEDx Canberra in 2013, alongside Professor Temple Grandin in 2015 and as a keynote speaker at the Autism@Work conference and the Asia Pacific Autism Conference in 2017. Jeanette facilitates a support group for women on the autism spectrum in Canberra and has received a number of awards including the 2016 ACT Volunteer of the Year and finalist in the 2017 ACT Woman of the Year award. Jeanette has worked for the Australian Public Service since 2017 and has a regular guest presenter spot on Canberra Radio 2CC's Talking Disability program for the Disability Trust.

What can teachers do: a parent's perspective

Educators and carers working as partners helped **Josie Santomauro's** son with Asperger Syndrome to confound initial expectations to forge a successful career. Josie was interviewed by **David Wilkins** about her perspective about how best to support students with autism spectrum disorders (ASD).

Tell us a bit about yourself and your personal experience in the autism community?

My son was diagnosed 24 years ago at age 5 when the term Asperger Syndrome had only recently been interpreted and introduced into the

Western world. When the paediatrician mentioned the word 'Autism' I honestly didn't know what she was talking about; when they mentioned 'Asperger' I thought he had a degenerative disease, I was so naive.

I remember the paediatrician's words. She had just informed me that unfortunately my five year old son was not only diagnosed with this thing called Asperger Syndrome and this was a 1 in 10,000 prevalence, but to top that off, he would most probably be a single bachelor and never leave home.

After many years of advocacy, support and early intervention we fast forward to today – my son is now aged 29. He and his wife have also purchased their own home and have celebrated nearly five years of marriage and have welcomed their first child late last year. Also, after seven years of university, he graduated three years ago as a Doctor of Philosophy. His research was on autism, of course! During his research he worked closely with the world guru, Dr Tony Attwood, using a program that Tony and Michelle Garnett created. Damian also is a speaker on the Autism conference circuit.

Today he works as a research fellow for the Psychiatric Epidemiology and Burden of Disease (PEABOD) Research

Group based at the Queensland Centre for Mental Health Research (QCMHR), Australia. He is also an affiliate assistant professor at the Institute for Health Metrics and Evaluation (IHME), University of Washington, for his work on the Global Burden of Disease Study where he is responsible for the epidemiological modelling of autism spectrum disorders (ASD), fetal alcohol syndrome, and alcohol dependence.

Proud mum?! As I type this he is at a conference on a Greek Island representing his work colleagues.

...his claim to fame is that by the age of 10 his difficult behaviours placed his teacher on stress leave.

What was school like for your son?

A real mixed bag. During his primary educational years, Damian attended two mainstream schools and a school for Autistic children as well as completing some home-schooling. I'm not going to sugar-coat them: the years were tough – we've had meltdowns where he's kicked the classroom furniture about and his claim to fame is that by the age of 10 his difficult behaviours placed his teacher on stress leave.

He absolutely flourished at the school for autistic children: it was a place where he learned living skills, social skills, friendship skills – important life skills – as well as having a sense of comfort and the lack of pressure of a noisy stimulating classroom environment.

Secondary schooling was a different kettle of fish that stank as well: the usual trying to fit in, bullying, hormones, add a large dose of Asperger and in his final graduating year voila, the mix was mental illness in the form of suicidal and homicidal ideation. It took a good year to nurture him out of that dark world.



Josie Santomauro

What would you have liked your son's school(s) to have done differently?

I've 'danced' with staff at IEP (Individual Education Plan) meetings, teacher/parent meetings, seen the inside of many a principal's office, visited the Special Ed schools, you name it, I've been there and 'danced' with and to them. Why do I call it a dance? Because it has to be choreographed, there are steps to be learned, rhythms to be abided by... you get what I'm trying to say. Some schools refused to participate in the dance, or danced to their own tunes at the cost of Damian's education and mental health.

I would have liked one of his primary schools to have had an open mind, to be prepared to move with Damian's needs and not be so constrained and robotic in their way of teaching. To not clump all the children with special needs into one classroom to supposedly make it easier for the teacher-aide. which ends up being a natural disaster, particularly if their teacher is a new graduate!

What do you wish every teacher knew about teaching students with autism?

That behind the label there is an ordinary child, the same as others, who like all children may at times need some extra dispensations, which will not only assist the child's day to day mood but will benefit the teacher and the classroom.

To not be afraid, and to not think students with autism are all the same. To not judge one because you had a negative experience in the past. View each student with autism with a brand new outlook.

What do you see as some of the areas for improvement in schools?

Educators and carers need to work together as equals and partners. We always tried to work with the education system, and not against them, and this is how we gained their respect, even if they didn't agree with us. With respect it was easier to put your point across, to be heard.

Conduct professional development days for ALL staff, from the cleaner to the principal, for them to learn about autism. It's my wish that a subject on autism is implemented in all teacher's colleges, not as a chosen subject but as a set subject.

What are some strategies which schools can employ to support students with autism to achieve their potential?

- Empower them by involving the student with decision making, whether it's how much work they are able to do

that day to rewards/consequences for positive/negative behaviours.

- Be sensitive, insightful and observant; see negative behaviours as a cry for help: acting out is usually a sign of frustration, anxiety, stress, boredom or sensory overload.
- At IEP meetings, create a safe network who are genuinely interested in providing a positive schooling environment for all.
- Classrooms are so visually stimulating and vibrant nowadays; prepare a small area of the room where the child with autism can go to wind down, destress etc.

Are there any specific strategies which you think might help with teaching literacy to those on the spectrum?

If we change the lens through which we see obsessive behaviours, we can view these pre-occupied behaviours as strengths, then capitalise on them. Take advantage of the student's special interests and redirect their attention to new work which involves their interest.

If possible, try to rewrite or plan their work around their obsession. For example, if they talk about trains night and day, you can have them search and borrow books on trains: a fiction story as well as non-fiction. Create homework, comprehension, spelling tests, etc around the topic of trains: the enthusiasm will be infectious.

Unpack and break down tasks, even if it means cutting up the homework sheet into sections. Having everything all on the one page with no dot points or breaks can be very visually overwhelming and they don't know where to start, so they don't!

Josie Santomauro is a full-time writer living in Brisbane, Australia. Her son, Damian, was diagnosed with Asperger Syndrome at the age of five. Josie has written over fifteen books on ASD, as well as numerous fiction books for children and young adults under the name Josie Montano. She regularly gives seminars and talks on ASD, and in 2009 was awarded the Parent/Carer Award in recognition of outstanding achievement by Autism Queensland Australia.

The emergent literacy skills of preschoolers on the autism spectrum

The Autism CRC has identified some of the factors that predict emergent literacy skills in ASD children.

Purpose of the Study

It is estimated that between 30 – 60% of school-age children on the autism spectrum struggle with reading. In response to the striking lack of research examining early or emerging literacy development in children with autism, our overall objective in this study was to identify and measure factors that predict emergent literacy skills in children on the autism spectrum before they transition to school.

Aim of this Study

The aim of this study was to describe the emergent literacy skills of preschool children with autism, prior to school entry. We also wanted to find out how factors such as home literacy environment, autism symptomology, age, and general oral language skills are related to children's emergent literacy performance.

Study Description

This research involved a cross-sectional cohort study. A total of 60 children on the spectrum were recruited of whom 57 met our inclusion criteria: (a) children had received a written clinical diagnosis of autism spectrum disorder in the community, sighted by the research team, (b) children were at least 4 years of age and had not yet started formal schooling, (c) children spoke in short

sentences, (d) children were able to participate in preschool type activities such as pointing at pictures and following simple commands, and (e) children obtained a score of 11 or higher on the SCQ-Lifetime version (which determines autism severity).

Children participated in a range of tasks tapping print-related and meaning-related emergent literacy skills. The tasks were generally administered over two sessions with an unfamiliar speech pathologist/research assistant, using a standard set of materials.

Data Analysis

Data were analysed to investigate correlations between home literacy environment, cognitive ability, autism severity and oral language ability and children's performance on the emergent literacy tasks. Regression analyses were performed to further investigate the predictors of emergent literacy performance.

Summary of Findings

Overall, our assessment battery of emergent literacy tasks was successful in eliciting responses from a group of 4- and 5-year-old preschool children on the autism spectrum. It should be noted, that consistent with our eligibility criteria, only children who spoke in short phrases and were able to participate in preschool-type activities took part in the study.

Results from this study showed that the preschool participants on the autism spectrum showed relative strengths in print-related skills, such as alphabet knowledge (letter names and sounds) and early phonological awareness, but relative weaknesses in meaning-related emergent literacy skills, particularly story retelling and comprehension ability.

There were no significant correlations between socio-economic status, home literacy environment or autism severity and emergent literacy performance,

except for letter name knowledge. Notably, children who presented with more severe autism symptoms (as measured by the SCQ) performed better on the letter name knowledge task. However, it should be noted that most parents created a relatively rich home literacy environment.

As expected, significant correlations were found between children's nonverbal cognitive ability and oral language performance and emergent literacy performance. In other words, children with better cognitive and oral language skills performed better on tasks measuring emergent literacy skills.

The only significant individual predictor of print-related emergent literacy (when performance on all print-related tasks was combined) was children's performance on the PPVT (measuring receptive vocabulary). Significant individual predictors of meaning-related literacy (combining all meaning-related tasks) included nonverbal cognitive ability, oral language performance, and autism severity.

This article is the executive summary of a report published by the Cooperative Research Centre for Living with Autism (Autism CRC) which is the world's first national, cooperative research effort focused on autism. One of their current projects, led by Marleen Westerveld, is "Predicting optimal literacy outcomes for autistic children." For more information on the Autism CRC's School Years Program visit: <https://www.autismcrc.com.au/our-programs/school-years>

References

Westerveld, M., Trembath, D., Paynter, J., Roberts, J., Webster, A., Ridley, G.,... Redoblado-Hodge, A. (2016). The emergent literacy skills of preschoolers with autism. Full report. Brisbane: Cooperative Research Centre for Living with Autism.

How reliable are the early signs of autism?

The Olga Tennison Autism Research Centre at Latrobe University has developed a mobile application which gives parents access to early autism detection based on evidence rather than 'Dr Google'

Eleven years ago, Dr Josephine Barbaro from La Trobe University's Olga Tennison Autism Research Centre began to develop a method for reliably detecting early signs of autism. The Social Attention and Communication Study (SACS) comprises a set of social-communication behaviours monitored in children aged between 12-24 months by Maternal and Child Health (MCH) nurses trained in its use. Almost 350 nurses have now monitored over 35,000 Victorian children.

In both the original SACS study (2006-08) and the second study SACS-R (ongoing since 2013), 81% of children who were identified as having a high likelihood of autism by the nurses, did in fact have autism. The SACS with 84% sensitivity and 81% positive predictive value, outperforms the next best tool, the MCHAT, which has a positive predictive value of 1-11% when used in community samples.

Early detection of autism is crucial, because it enables early intervention, which we now know significantly improves children's lifelong outcomes, quality of life, and family functioning.

As the average age of autism diagnosis in Australia is between 4 and 6 years, the critical opportunity for early intervention is often lost. With the multiple demands on doctors these

days, parents with concerns about their young children are commonly told to 'wait and see' how their child develops.

There is still a widespread perception that autism can't be reliably diagnosed in children under the age of 3, but as the robust results from our SACS studies show, we can detect early signs of autism in toddlers as young as 12 months of age. Early detection then allows earlier diagnosis by doctors and paediatricians.

Our challenge has been to find the best way to get the message about early detection to those in a position to act on it: parents, GPs and paediatricians and other health professionals. Our first step in addressing this challenge has been transforming the solid evidence base of SACS into an accessible form – which is why we developed a mobile application, called ASDetect.

ASDetect gives parents something tangible to take to their doctor which is based on evidence, rather than 'Dr Google.' However, it is not meant to replace a formal diagnosis. Rather, it comprises a series of video-led assessment questions that guide parents through key social-communication milestones. A clear context for the behaviours that are being assessed is provided by videos of children both with and without autism. ASDetect returns an instant result of 'high' or 'low' likelihood of autism and a detailed results report that parents can take to their GP or paediatrician. It's intended to empower parents to seek answers to their concerns about their child's development.

ASDetect is free and available to download for both Android and Apple devices. See <http://asdetect.org>

This article summarises recent research by La Trobe University's Olga Tennison Autism Research Centre (OTARC). The complete academic papers by Dr Josephine Barbaro and Professor Cheryl Dissanayake discussing the first SACS program were published in 2010 and 2013. The results of the second SACS program are currently being collected.

OTARC's mission is to advance knowledge of the nature and causes of autism and to develop and study evidence-based intervention and other strategies for supporting those affected. For more information visit: <https://www.latrobe.edu.au/otarc>

References

- Barbaro, J., Dissanayake, C. (2010). Prospective identification of autism spectrum disorders in infancy and toddlerhood using developmental surveillance: the social attention and communication study. Melbourne: *Journal of Developmental & Behavioral Paediatrics*, 2010 Jun;31(5):376-85. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/20495475>
- Barbaro, J., Dissanayake, C. (2013). Early markers of autism spectrum disorders in infants and toddlers prospectively identified in the Social Attention and Communication Study. Melbourne: *Autism*, 2013 Jan;17(1):64-86. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/2273568>

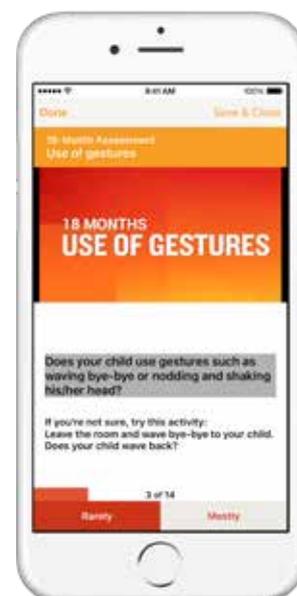
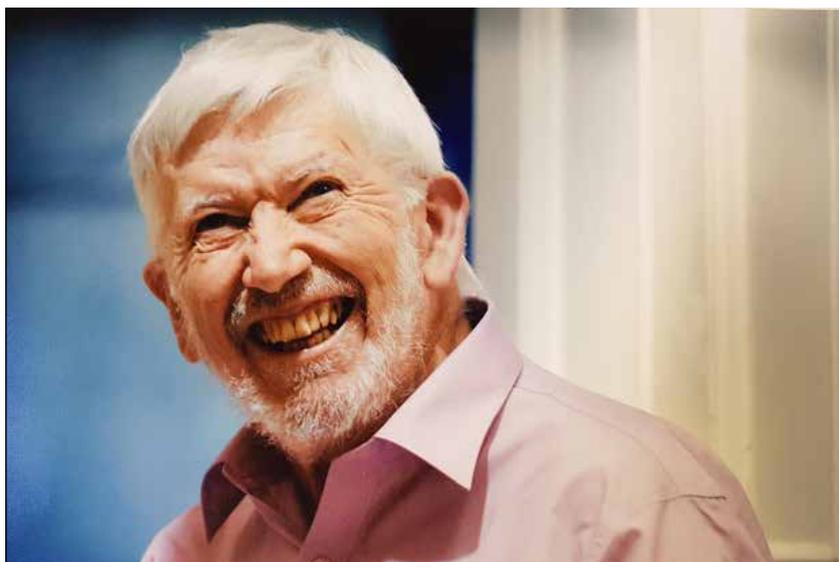


Figure 1. ASDetect is based on Latrobe University's evidence-based research

Chris Davidson remembered

Diane Barwood and Dick Weigall pay tribute to **Chris Davidson: founder of the LDA Journal and a pre-eminent educator of students with learning difficulties.**



Chris Davidson was awarded the Order of Australia Medal in 2009 for his services to Special Education. As a long-standing member of LDA, he is the founder of our journal, the Australian Journal of Learning Difficulties, first established in 1969 as the Australian Journal of Remedial Education. He served as Editor of the Journal for 36 years, until his retirement in 2005. Chris was an active member of LDA since its establishment in 1965 as the Diagnostic and Remedial Teachers Association of Victoria, and served as a member of Council almost continuously from 1968 to 2005, taking on the role of Vice-President and Treasurer on a number of occasions.

Chris had overcome severe personal childhood disabilities. He had a huge empathy for those children with dyslexia and other learning difficulties. After graduating from the Diagnostic Testing and Remedial Teaching Course at the famous Schonell Research Institute in Queensland, Chris became the head of the Special Education Department at Glamorgan (Toorak Campus of Geelong Grammar Prep School) in 1968 and moulded it along his own strictly professional lines.

Special Education was his passion and nothing would stand in the way of his quest to achieve justice for the forgotten child. He kept his mind open to new perspectives of teaching and expertise from a variety of agencies

and specialists. His advice was sought and generously given. His department at Glamorgan became a beacon for special education. Those intending to establish their own special education centres came to him for advice. He also provided guidance to the Army and to the Victoria police.

Chris was also a founding member of SPELD Victoria, and served on the committee as Vice-President for many years, and as President for two years. He co-edited the SPELD Bulletin and launched its new journal with Daryl Greaves in 2006. He saw the benefits of organisations with similar purposes working together and encouraged alliances between LDA and SPELD. Joint conferences were held at Glamorgan while he was head of special education. Glamorgan also provided school-based research with such acknowledged experts as Dr John Munro and Professor Gordon Stanley.

He was awarded the LDA Mona Tobias Award in 1995, and was acknowledged in Who's Who in 2000. In his varying capacities he has helped numerous children and adults who found learning difficult, along with their parents and teachers.

The community has benefited from his several publications promoting literacy. At a time when phonics was

out of favour, he insisted that phonics was the answer and wrote 'Spelling, a Phonic Approach' with Bruce Wicking in 1975. He strongly believed that learning should be fun. Accordingly he then co-authored with Dick Weigall three 'Spellout' board games: 'Sail through Spelling', 'Race through Reading' and 'Pony Club Trail Ride'. Later, in 1994 he wrote a more comprehensive version of 'Spelling, a Phonics Approach', calling it 'Wordswork' and dedicated it to Bruce Wicking who had died in 1988.

Chris' voracious love of travel took him to many countries where he would meet with other professionals of like-mind. Mim (his wife) has been a tireless supporter of his endeavours and along with his two children Tina and Tony accompanied him on many of his various journeys.

While hundreds of students have benefited directly from his personal intervention, many more throughout Australia and in dozens of other countries throughout the world have also benefited from the Australian Journal of Learning Difficulties. Chris gave generously of his time for over 40 years to advance the cause of special education. His enormous voluntary contribution has made a significant difference to the way in which we now perceive and assist the intelligent underachiever.

Consultants' Report

Ann Ryan, Convenor, LDA Consultant Committee

What a whirlwind start to the year this has been! Much has been happening to keep the Consultant Committee busy and this does not look like easing for a while. It is exciting to have a range of professional development days in motion for 2018, and to have new consultant support processes in place.

Dr Anna Bortoli spoke on the 18th March, at the Treacy Centre in Melbourne, on identifying and addressing the needs of students with ASD and ADD – the 'two cousins'. Anna is a senior lecturer at RMIT University, and a special education and autism consultant. This event was fully booked and I do encourage interested attendees to book early for future PDs.

On May 19th we are equally excited to have Dr Judi Humberstone present on Dyscalculia. As a senior lecturer, psychologist and researcher based at the Number Cognition Lab, Melbourne University, Judi is very aware of the difficulties students experience in developing mathematical understandings. Judi's motivation stems from many years teaching mathematics, her awareness of the number of students reporting a dislike for mathematics and the significant impact a lack of mathematics ability has on the self-esteem of affected individuals. Bookings can be made through the [LDA website](#).

Following Judi's presentation, on the same day, we plan to run a session for consultants and other interested people: 'Specialist Teacher Consultants: Running a private practice'. While this session will focus on the day-to-day needs of practising consultants, it will also be of interest to anyone who is currently considering applying for Specialist

Teacher Consultant certification with LDA. It needs to be acknowledged that we are private practitioners and are not employed by LDA.

Following this, on the 16th June, in Melbourne, Jenny Baker will deliver a full day session on writing: One Sentence at a Time: improving the quality of students' writing, 8-18. Watch this space for further information. Sydney people will have recently been inspired by 'Leaving Nothing to Chance - How Explicit Instruction can prevent Early Literacy Difficulties', presented by Dr Lorraine Hammond and Brooke Wardana.

Council continue to support and facilitate the service provided by Specialist Teacher Consultants to assist students with learning difficulties through effective teaching practices based on scientific research. A new award will be instigated this year to recognise the work of worthy and exceptional consultants. This award will be named the Rosemary Carter Award, and is in recognition of Rosemary's contribution to LDA, most especially the work she did to ensure all students, especially those from disadvantaged backgrounds, had equitable access to educational support.

Changes have been made to the Online Tutor System (OTS) so that families now have the option of accessing some consultants through Skype or similar face-to-face video conferencing, as decided by the family and consultant. Being in a regional area, I have used this technology for several years to offer support to students. Interactive online whiteboards enhance the experience so that both the student and teacher share the same work 'page'. I use Scribblar.

A recent survey of consultants indicates that more than 27% of OTS consultant users receive more than 20 student referrals a year through the system. When consultants are unable to take on further students, they withdraw from the OTS, sometimes temporarily. Many Victorian consultants can be overwhelmed by the number of student referrals and cite this as the most common reason for not using the OTS. However, Council are working to increase OTS use in regional areas and other

states. Recently there has been an influx of new consultants from NSW.

To encourage OTS use and to improve access to LDA certified specialist teacher consultants

for more families, Council has decided to waive the OTS fee for non-Victorian consultants until they take up with three students from the OTS. This is in line with the referral procedures of pre-OTS days.

This brings me to the words of a previous Consultant Committee Convenor, Diane Barwood. In the LDA Bulletin, May, 2014, Diane wrote: 'LDA Consultants cannot be complacent. They should access community contacts to spread the mission of LDA and the support that is offered to students by the Consultants. There is much competition in the world of specialist teachings, so we Consultants need to get out and promote ourselves and the skills we bring to the task.' Well said Diane! We have much work to do.



For details about the process and requirements for becoming an LDA Specialist Teacher Consultant, please refer to the website www.ldaustralia.org

Upcoming Professional Learning

Dyscalculia – Helping Students Develop Mathematical Understandings – Dr Judi Humberstone

Date: Saturday 19 May 2018
Time: 9.30am – 1.00pm
 Registration from 9.00am
Venue: Treacy Centre, 126 The Avenue, Parkville, Melbourne

Dr Judi Humberstone, Senior Lecturer and Psychologist, Number Cognition Lab at University of Melbourne, is a trained mathematics teacher who has taught in Australia and the UK for over 30 years. Motivated by the number of students reporting a dislike for maths and the significant impact a lack of maths ability has on the self-esteem of affected individuals, Judi retrained as a clinical psychologist. Judi's current research aims to answer the question: "How do children acquire mathematical understanding?" In association with colleagues, Judi's research addresses:

- The relationships between the development of mathematical concepts and general cognitive abilities across the primary-school years
- Individual differences in the development of primary-school aged children's arithmetic competence
- Individual differences in students' acquisition of algebraic ability
- The use of interactive assessment to evaluate children's mathematical learning potential in rational number and algebra.

Cost: LDA Member \$60
 Non Member \$75

Register at <https://www.ldaustralia.org/pd-humberstone-2018.html>

Developing Sentence Complexity in Written Expression – Jenny Baker

Date: Saturday 16 June 2018
Time: 9.00am – 3.00pm
 Registration from 8.00am
Venue: Treacy Centre, 126 The Avenue, Parkville, Melbourne

Jenny is a Speech Pathologist with extensive experience in the assessment and intervention of written language, from early narrative constructions to analytical text-based essays. This workshop will teach participants about the functional role of grammar within narrative and persuasive texts, including strategies for explaining punctuation.

- Within Narrative writing - the focus will be on increasing subordination within sentences using adverbials, descriptive language, connecting devices and verb types
- Within Expository writing - the focus will be on a variety of linguistic devices used to deliver imagery, power, emphasis, emotion and persuasion.

A case study of a year 4 student will be used to illustrate how these strategies were successfully employed. Jenny presents this workshop to speech pathologists, teachers, tutors and parents at DSF (Perth). She has also presented at The Language, Literacy & Learning Conference in 2017, with practical and positive outcomes!

Cost: LDA Member \$135
 Non Member \$150
 Group of 5 \$140pp
 Student \$100

Register at <https://www.ldaustralia.org/pd-baker-2018.html>

Reading and language comprehension difficulties: research-practice links and implications for the classroom – Kate Nation



Melbourne: Friday 21 September 2018
 Treacy Centre,
 126 The Avenue, Parkville,
 Melbourne

Adelaide: Monday 24 September 2018
 venue TBC

Sydney: Friday 28 September 2018
 venue TBC

LDA is very excited to announce that Professor Kate Nation, Professor in Experimental Psychology and Fellow of St. John's College, London, will be visiting Australia in September at the invitation of LDA. Kate has interests in children's language and literacy development. Her research is concerned with the psychology of language, especially reading and its development. She is interested in how children learn to read words and comprehend text, and more generally, the relationship between spoken language and written language. Her work is of direct relevance and critical importance to everyone working with children with language and literacy difficulties.

While registration details and venues are still to be confirmed, please note in your calendars and watch the [LDA website](https://www.ldaustralia.org) for confirmation and booking.