Collaborative, evidence based understanding of students with ASD

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Positive Partnerships
www.positivepartnerships.com.au
Overview

• Conceptualisations of autism
• Current definitions (DSM-5)
• Features of autism – social communication and RIRB
• Language features in depth
• A tool for collating information
• Strategies
Aim

• To provide teachers, speech pathologists and psychologists with a common understanding of the characteristics of autism spectrum disorder, including new diagnostic criteria.

• To develop a shared understanding of the impacts of these characteristics in school aged children.

• To introduce a common tool for collecting and sharing information and developing strategies.
Collaboration is the key…..

‘Autism…is a condition that straddles so many different disciplines in its definitions, education and care that it is inevitably best approached in a multidisciplinary way’ (p.5).

Jordan, 2001
What is Autism Spectrum Disorder?

Autism spectrum disorder (ASD) is a lifelong neurodevelopmental disability that affects how an individual communicates and interacts with people and their environment.
Understandings of autism over time

Autism

- Possession by devils
- Holy fools
- Rain man
- Mental illness
- Mr Spock
- Changing lings
- Sherlock Holmes

From: Autism Spectrum Australia
Evidence for autism in folklore?
J Leask, A Leask, N Silove

"The girl I gave birth to has been stolen, she’s gone."
(Mother, A Current Affair, Vaccination: a stab in the dark?
30 January 2001)

"So the goblins came. They pushed their way in and pulled baby out, leaving another all made of ice."
(Maurice Sendak, Outside over there. Puffin Books,
Middlesex, UK, 1981)

In the wake of the now settled MMR controversy and attempts to link the vaccine with autism, there has been widening interest in whether autism has increased in incidence over the past two decades.\(^1\)\(^2\) While this question is yet to be fully resolved, folkloric heritage suggests the existence of autism long before its formal recognition in 1943.\(^3\)

Fairytales from the British Isles, Germany, and Scandinavia include stories about changelings. They describe a child who exhibits remarkable and sudden changes in behaviour and/or appearance, explaining that supernatural folk steal normal children and replace them with one of their own, or some other substitute. The new child—the changel-

non-scientific cultures. The legends were society’s attempt to make sense of, and cope with, child disability, providing a coherent explanation for its occurrence.\(^6\)\(^7\)

We suggest that evidence for the existence of autism before the twentieth century lends force to the argument that the disorder’s existence is not just a product of recent technologies or the environments that these technologies have created. Whether such technologies have augmented an existing predisposition in some individuals remains to be resolved.

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A Leask, Wentworth Area Health Service Population Health Unit, Penrith, New South Wales, Australia
The history of ideas on autism
Legends, myths and reality

LORNA WING  The National Autistic Society, London, UK

ABSTRACT The development of ideas about the nature of autism is described, covering myths and legends, accounts of individuals in the historical literature, the search for identifiable subgroups, Kanner's and Asperger syndromes, and the current view of a wide autistic spectrum. Changes in theories of aetiology are outlined, including the early magical and mystical beliefs, the era when purely psychological and emotional causes were promulgated, and the present day research into biological mechanisms. The major advances in understanding the neurological and psychological aspects of autism, which have led to the development of special methods of education, are discussed. The rate of increase in knowledge in recent years gives hope for future progress in understanding and treatment.

KEYWORDS aetiology; autistic spectrum; early literature; historical account
Conceptual Swings

Genes, attachment and the autism phenotype; The Geek syndrome

Mental illness – developmental disability

Medical - educational

Behaviourism – relationship focus

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Why does conceptualisation matter?
Interventions, treatment and management for autism: “fad magnets for off the wall treatments” (Matson, 2007)
DSM-5 released May 2013...
Autism spectrum disorder

Persistent deficits in social communication & social interaction across contexts

Restricted, repetitive patterns of behaviour, interests, or activities

Symptoms must be present in early childhood (but may not become apparent until social demands exceed limited capacities)

Symptoms together limit and impair everyday functioning
Severity and other information

Diagnosis should include:

• Severity information for both domains
  • Requiring support
  • Requiring substantial support
  • Requiring very substantial support

• With or without accompanying intellectual impairment

• With or without accompanying language impairment

• Associated with a known medical or genetic condition or environmental factor
But what characteristics do we see in practice? What are the impacts at school?
Autism profile – social interactions

- Interest & skills in interaction with people can vary
- May miss social cues – ‘hidden curriculum’
- Unusual quality of eye gaze
- May have difficulties understanding what others are feeling and why (empathy)
- Difficulties adjusting behaviours to suit various social contexts
- Differences in facial expression, body posture & gesture
Autism profile – repetitive behaviours & restricted interests

May include:

• Adherence to routines, insistence on sameness – sometimes non-functional, with great distress at small changes

• Special interests in particular topics – unusual in either choice (e.g. vacuum cleaners) or intensity

• Stereotyped or repetitive motor movements, use of objects or speech (e.g. flapping, toes walking, lining up toys or flipping objects)

• Unusual sensory responses – seeking or avoiding

• May prefer rote activity to imaginative play
Autism profile – communication & language

- Understanding rules of social communication
- Echolalia and stereotyped communication
- Comprehension of language (receptive language)
- Literal language
- Prosody – the ‘music’ of language
- Expressive language difficulties
Expressive language

Form

How we communicate

Why we communicate

Function

Content

What we communicate

See Boucher (2012); Riches et al, (2010); Tomblin (2010) for reviews
Receptive language (comprehension)

“comprehension, semantics and the processing of meaning generally are most reliably and severely affected …”

Boucher, (2012), p. 225

Even when language is not delayed, an uneven language profile can be detected, with comprehension more affected than expression.
Rules of social communication

See the work of Brenda Smith Myles for information on the “Hidden Curriculum”
Literal understanding of language….

+ reading speakers’ intent

- That brown and orange striped suit looks great
- What do you think you are doing?
- Look at the time!

Whyte, Nelson & Khan (2011)
It's hard to seize the day when you've got to cope with the morning first!

Ginger, are you getting up or spending the whole day in bed?

That's a change! I usually don't get a choice.
Prosody

suprasegmental aspects of speech including variations in:
• pitch
• loudness
• pausing
• intonation
• rate
• stress
• rhythm

• prosody in autism can be exaggerated, monotonous or ‘sing-song’

See McCann et al. (2007)
“Individuals with ASD are at risk of reading difficulties with reading comprehension skills being particularly vulnerable”

Norbury & Nation (2011) p. 195
A word about girls.....

- Ratio of boys to girls varies according to intellectual ability
- **Girls with ASD are different to girls without ASD**
- But...girls with ASD are different to boys with ASD

2:1 IQ 6:1

Fombonne (1999); Fombonne (2003); Carter et al (2007)
How can multiple disciplines capture and use this information?

- Social skills
- Interests & behaviours
- Language & communication features
## Positive Partnerships Planning Matrix

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<thead>
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<th>Restricted Interests</th>
<th>Sensory Processing</th>
<th>Information processing &amp; learning styles</th>
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Strategies

general

specific
What makes a successful program? 
Key effective elements:

- autism specific curriculum content
- highly supportive teaching environment
- generalisation strategies
- predictability and routine
- functional approach to problem behaviour
- transition support
- family involvement
- multidisciplinary collaborative team support

Prior, Roberts, Rodger, Williams & Sutherland,(2011)
Multi-level strategies – school

Student Level
individual supports

School level
positive climate, ecological management, systematic instruction, collaboration, functional approach

System level
class sizes, professional development, teacher planning time, support staff, multidisciplinary support

Roberts (2013)
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Supporting receptive language & literacy: adapt speech, teach non-literal language & comprehension

- direct
- simple
- show and tell
- no questions as instructions
- time to process
- avoid sarcasm

Whyte, Nelson & Kahn (2011); For literacy comprehension strategies, see also www.cer.education.nsw.gov.au/intervention/teacher-resources
Visual supports

1 Red weekly timetable

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<th>Monday</th>
<th>Tuesday</th>
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<td><strong>Morning</strong></td>
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<td>Reading groups</td>
<td>Scripture</td>
<td>Reading groups</td>
<td>Reading groups</td>
<td>Assembly</td>
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<td><strong>Afternoon</strong></td>
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<td>Science with Mrs P</td>
<td>Gross motor</td>
<td>Library</td>
<td>Computers</td>
<td>Year one singing</td>
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3 Green Classroom Rules

- Listen carefully when the teacher is talking
- Work quietly
- Put your hand up and ask questions when you don’t understand
- Use polite words like ‘please’ and ‘thankyou’
- Hands and feet to ourselves
Supporting expressive communication

- Encourage communication attempts
- Use pictures and signs to support speech
iPads?

See Joy Zambala’s work for information on the SETT framework; [www.positivepartnerships.com.au](http://www.positivepartnerships.com.au) for iPads factsheet
Conversation and social skills
Questions, comments, wrap up
References


