

' Autism is like a mystery novel in which it is not clear exactly what happened to one of the major characters, why it happened, and who or what is responsible. '

Whitman 2004

# A Curriculum for Excellence

## Purposes of the Curriculum from 3-18

- Successful learners
- Confident individuals
- Responsible citizens
- Effective contributors

# Wood Report, 1929, pt 3, p80

' In any community a large number of them (defectives) will be found...insane persons, epileptics, paupers, criminals, unemployables, habitual slum dwellers, prostitutes, inebriates, and other social inefficient. The overwhelming majority of the families thus collected would belong to that section of the community we propose to call the social problem class.'

## Early Development

‘Being affected by others is a design feature of human beings – a design feature that transforms what a human being is.’

Hobson

# Why is Learning Missed?

Typical social developmental experiences such as

- joint attention
- social referencing
- imitation
- attachment, etc

lead to lots of other learning.

Language and Social Communication are catalysts for cognitive development.

# Social Understanding

This major impairment impacts on

- learning
- development
- inclusion

# Social Interaction & Understanding

- This aspect of the triad is always significantly impaired right across the spectrum in different ways
- Wing's descriptors of the social spectrum - aloof - passive - active but odd - describes well the variation in social functioning
- However the 'active but odd' type can have just as isolating a social life as the 'aloof' type

# Devastating Impact of Impairment in Social Understanding

- Is that funny ?
- How many times is it funny ?
- Why is it funny ?
- Is it cheeky to find that funny ?
- Do I laugh too loud when I find that funny ?

# Common Language and Communication Barriers right across the spectrum

- I don't really rate what you say
- I don't trust what you say
- I have no interest in decoding what you say
- I haven't got a clue why what you say seems such a big deal-it's not a big deal to me
- What is this communication obsession all about ?
- Why communicate at all ? I can manage fine without it

# The Communication Spectrum

- Loves talking to people
- Enjoys, values and understands certain aspects of the communication process
- Abhors and avoids nearly all communicative contact

# The Language Spectrum

- Expresses himself with sophisticated and highly developed forms of language
- Has no speech and uses other expressive tools

# Language

'50% of people with autism remain without language for life-

if only people could see that the communication difficulties go way beyond language -

that's just one part of the problem'

Rita Jordan

# Picture Exchange Communication System

- provides a system and a structure for sequencing word order and expression
- helps understanding of the communication process through exchange

# Thinking in Pictures

- People with autism often describe themselves as thinking in pictures
- People with autism tend to be visual learners
- This means that communicating and understanding are often linked to seeing rather than hearing

# Tools for Visual Understanding

- Objects
- Pictures/Photos
- Symbols
- Text

# The environment and visual understanding

- Colour coding
- Furniture
- Screens
- Timetables
- Timers

# Sensory Difficulties

• can cause barriers in a range of areas such as

- discriminating tactile information
- motor control
- filtering of auditory information
- processing of auditory information, etc

## Sensory Modulation and Learning

'Noise was a major problem for me. When I was confronted with loud or confusing noises, I could not modulate it. I either had to shut it all out and withdraw, or let it all in like freight train. To avoid its onslaught, I would often withdraw and shut the world out. As an adult, I still have problems modulating auditory input.'

Temple Grandin, 1988

# Cognitive Theories

- Theory of Mind
- Central Coherence Theory
- Executive Function Theory

# Central Coherence

Central coherence is the ability to

- get the big picture
- remember meaningful as well as meaningless information
- read a story and pick out the key ideas
- pay attention to the whole as well as the parts

# Cognitive Theories

- are not exactly new but research in these aspects of autism does lag behind
- there is less understanding of these aspects of autism

# Theory of Mind

Theory of mind is the ability to understand the thoughts, feelings, intentions of other people as well as a capacity to use such knowledge to anticipate what other people might do

# Executive Function

Executive functions of the brain help with

- learning from mistakes
- Disengaging from the immediate environment
- Using what you've learned in a new situation
- Organising
- Making plans
- Inhibiting inappropriate or overlearned responses
- Monitoring progress
- Self monitoring
- Flexibility
- Switching attention

For all of us -

Theory of mind deficits are on a spectrum.

Weak central coherence is on a spectrum.

Executive function deficits are on a spectrum

# Barriers to Learning and Development

- Dependent on prompts from others or the environment in order to learn and remember
- Hard to learn spontaneously
- Hard to apply what they have learnt to new situations
- Most of what they do is habitual
- They may rely on one action to cue the next
- They easily acquire learnt behaviour
- They rely on prompts to complete tasks
- Interruptions may mean having to start again or result in distress and confusion

Rita Jordan

## Idiosyncrasies in assessment

- Environmental contexts and cues
- Social difficulties
- Unusual use of language
- Frequent off-task behaviours
- High distractability
- Variable motivation

( Ozonoff et al, 2002 )

## Autism and Intelligence

'Autism exists with any level of intelligence, but many individuals with autism also suffer from learning disability.'

O'Brien & Pearson, 2004

## Limitation of IQ tests

- ' Intelligence tests provide only limited information about many of the cognitive abilities and disabilities reportedly associated with autism and more attention needs to be given to examining specific cognitive processes and possible deficits in areas such as information processing, executive functioning, social cognition, and metacognitive knowledge.'

Whitman, 2004

'If intelligence is composed of not one but multiple abilities, persons with autism would be characterised, *relative to their overall IQ*, as having a contrasting profile of abilities and disabilities.'

Whitman, 2004

# Howard Gardner's Theory of Multiple Intelligences

There are many different ways to be intelligent.

The background features a complex pattern of overlapping circles and concentric rings in a light blue color against a dark blue background. The circles are arranged in a way that they overlap each other, creating a sense of depth and interconnectedness. The concentric rings are centered within the circles, adding to the geometric complexity of the design.

## Interventions

- Biomedical
- Psychological
- Educational
- Therapeutic
- Alternative
- Wild and Wacky
- Other

# The Intervention Spectrum

- Curative v non curative
- Autism specific v non autism specific
- Primary or secondary or tertiary interventions
- Soft evidence or hard evidence or even no evidence
- Widely used and accepted v poor take up and bad press

## What can be worked on?

- ' An early diagnosis of autism allows secondary prevention programmes to be put in place sooner, thus increasing the probability of their success. Tertiary prevention programmes occur once a disorder is more fully manifested and are directed less at symptom prevention and more at symptom reduction and behaviour management.'

Whitman, 2004

## Early Intervention

' Programmes can be put in place to reduce sensory problems, enhance motor functioning, reduce eating problems, address dietary deficiencies, develop language, and promote social behaviours. If begun early, prevention efforts can sometimes significantly alter the developmental trajectory of a child.'

Whitman, 2004

# Inclusion needs

- Successful practice as a model to generate and sustain it
- Creative solutions
- Risk taking
- Wisdom and common sense
- A 'best interests' application
- Challenge to current practice
- Why not?