

Montessori Education for Autism

MEIA

Out of Education - Into Employment

From the hand to the brain
to the workplace

Learn 2012- Inclusive Education and Vocational Options

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Taj Connemara, No 2 Binny Road, Anna Salai, Chennai, 600 -002

Wendy Fidler – mini CV

Wendy Fidler – Expert Witness: advising the Court in England and Scotland on Civil and Criminal matters of Education Law, Education Negligence and Special Educational Needs.

Managing Director of Education Consultancy **Eight29 Limited** - www.eight29.com

Owner and Academic Director of **Wildwood Montessori** – for children with learning difficulties and spikey sensory profiles; www.wildwoodmontessori.com

Trustee and Chair of Education Panel for the **Dyspraxia Foundation** - www.dyspraxiafoundation.org.uk

Trustee and Academic Director of **Montessori Education for Autism (MEfA)** and Academic Director: www.montessorieducationforautism.com

Wendy has given talks, workshops and lectures about Special Needs Education in six continents; Antarctica is proving a little harder to conquer!

Overview of Lecture

- Legislation and current provision for adults and adolescents with special needs;
- Development of the adolescent brain;
- Role of handwork in developing cognition;
- Adolescents' engagement with an enriched curriculum;
- Types of employment suitable for adolescents with learning difficulties – including autism

Preview: Workshop 1

- Examine traditional Indian approaches which may limit independence and motivation;
- Examine the legal position in India;
- We will audit what employment provision is currently available for young people and adults with learning difficulties and autism in Tamil Nadu, India and globally.

Preview: Workshop 2

- In the second session we consider what hampers successful transitions into employment;
- We examine Five Basic Movement Patterns which are necessary for optimal brain development;
- And consider the implications for our own practice.

Preview: Workshop 3

- Consider what changes we can make to current educational practice to better prepare students for work or further training;
- We aim to work towards a generic prototype for helping adolescents in India make successful transitions out of education and into employment

Legal Inclusion Framework in the UK

- 1981 Education Act: Inclusion and Individual Education Plans – mandatory process of ‘Statements of Special Educational Needs’ and reviews
- 1982 SEN Code of Practice and the SEN Toolkit
- The Autism Act 2009
- The Adult Autism Strategy
- The Equality Act 2010
- Education and Training (Young People with Autism) Bill 2010-2011

Education Law

- Since the 1981 Education Act various UK governments have made a variety of changes to Education Law, but in essence, the focus on inclusion of children with special needs into mainstream schools remains a key focus;
- However, there are currently various proposals under review which would bring big changes to the ways in which children with special needs are identified, assessed and provided for.

Autism Act 2009

- **Autism Act 2009**– this is England's *first law for a specific disability*
- The Act, which received Royal Assent, puts the government's **Adult Autism Strategy**, on a statutory footing, making it enforceable.
- The **AAS** is designed to improve care, support and employment opportunities for people with autism and boost the skills of health and social care staff supporting them.

What is The Adult Autism Strategy?

- The autism strategy is a plan to help adults with autism have better lives;
- It was written by the government;
- The plan is for adults with autism in England;
- The plan says what the government will do;
- The plan also says what council and health services should do;
- There are five parts to the strategy.

Adult Autism Strategy Part 1

- **Making sure people know about autism**
- Everyone should know a little bit about autism
- Some people need to know more about autism: people in health services; social services; job centres; police or prison service.
- There will be courses on the internet to find out about autism and how to help. There will also be posters, booklets and short films.

Adult Autism Strategy Part 2

- **How adults can find out if they have autism**
- Every local area should have a plan for how people can find out if they have autism;
- If someone is told they have autism, social services should see if they need support;
- Social services should also see if any carers need support.

Adult Autism Strategy Part 3a

- **How adults with autism will get the right support and services**
- Services sometimes need to make changes so that people with autism can use their services in the same way as other people.
- Personal Budgets are a way that adults with autism can choose what support or services to have.

Adult Autism Strategy Part 3b

- **How adults with autism will get the right support and services (continued)**
- Sometimes, adults with autism need extra help to make choices;
- Advocacy is important;
- *It is important that young people get support when they are moving from child services to adult services.*

Adult Autism Strategy Part 4

- **Helping adults with autism get a job**
- People who work in the Job Centre need to know about autism;
- Employers need to know about autism;
- There should be help for people with autism to find and keep a job.

Adult Autism Strategy Part 5

- **What the local area (the council and health service) should do to help adults with autism**
- Every council should have a person in charge of helping their area write a plan for adults with autism;
- Every area should work with people with autism and their carers and families to write the plan.

Equality Act 2010

- The Equality Act replaces all previous discrimination and equalities legislation and streamlines protection from discrimination across a number of equality strands, including simplifying and strengthening the law, giving individuals greater protection from unfair discrimination and making it easier for employers and companies to understand their responsibilities;
- It sets a new standard for those who provide public services to treat everyone with dignity and respect.

Equality Act 2010 (2)

- Employers also have a duty to make reasonable adjustments for disabled staff.
- These adjustments are anticipatory in nature and are not only applicable when a disabled person has requested them.
- All organisations are required to have regard for the law: ignorance is not an excuse in the eyes of the law. **(HPC note)**

What does the Equality Act mean for people with special educational needs?

- **The Equality and Human Rights Commission** (EHRC) calls the Equality Act 2010 ‘the most significant piece of equality legislation in years’.
- Dyslexia, Dyspraxia, Autism, Asperger’s and other learning difficulties are recognised as disabilities under the Equality Act 2010 and compliance with it places responsibility on employers to enable access to premises and services by all employees and service users.

Education and Training (Young People with Autism) Bill 2010-11

- **Summary:** Requires the Secretary of State to make provision for the education and training of young people with **autism** and **Asperger's syndrome**; to ensure that work opportunities are provided for those young people, and for connected purposes;
- **Latest News:** This Bill is expected to have its second reading debate on 30 March 2012.

Guidance and Advice

- Guidance for Training and Employers
- Best Practice for Employers
- Social Enterprise Companies
- The impact of having a child with autism, or other learning difficulties on the employment of the child's parents

Guidance for Training and Employers of Adolescents with SEN

- Ashok will speak more fully about this tomorrow during our workshops – suffice to say that the leading UK special needs charities have all developed training programmes suited for SEN adolescents and adults;
- The National Autistic Society; The Dyspraxia Foundation, Dyslexia Action and many others provide courses and bespoke training.

Workplace Consultancy

- There is a growing need for Workplace Consultancy as employers seek to comply with the requirements of The Equality Act which recognises dyslexia as a disability.
- Working with organisations and industries to advise on the best options for them and their employees to support work performance might include work-focused psychological assessment followed up by a workplace consultation for individuals or groups.

Best Practice for Employers

- The *BBSRC Best Practice Guidance Note* covers legal requirements, dispels myths about disability and gives specific examples of common courtesies for communicating with employees with disabilities:

http://www.bbsrc.ac.uk/web/FILES/EmploymentCode/guidance_note_2_disabilities.pdf

- Biotechnology and Biological Sciences Research Council (BBSRC) www.bbsrc.ac.uk/

Advancing Vocational Opportunities for People with ASD

- <http://specialistpeople.com/>
- **The Specialist People Foundation** works to enable [one million jobs](#) for people with autism and similar challenges through social entrepreneurship, corporate sector engagement and a global change in mind-set.
- The foundation owns [Specialisterne Denmark](#) and the Specialisterne trademark. Specialisterne Denmark, which translates from Danish as “the specialists”, is a social innovation company providing IT consultancy services, where most of the employees are people with autism.

Three out of four Specialisterne employees have Asperger syndrome or high functioning autism

- Danish IT company [Specialisterne](#) (Danish for "The Specialists") was founded in 2005 by Thorkil Sonne when his son was diagnosed with ASD.
- Specialisterne's employees are fabulous software testers. Their error rates are extremely low, and they often solve software tasks faster than average in the industry.

Glasgow, Scotland

- More than 100 people with autism applied to join Specialisterne, based in Glasgow. Ten people have now completed an intensive six-month training programme to become accredited software test engineers and full-time employees. Many of them have previously lost their jobs due to their autism
- <http://ceis.org.uk/2011/07/11/software-firm-transforms-the-lives-of-people-with-autism/>

Left is Right

- The Swedish consultancy company [Left is Right](#) **only employs people with Asperger syndrome**. It was founded in 2006 by Wiola Franken Boman who has a child with Autism. The company's vision is to capitalise on the high competence and intelligence that people with Asperger syndrome possess by supporting their handicapped social and communication skills.
- <http://www.aspergertechnical.org.uk/discuss/topic24.html>

Specialisterne Acknowledged as Best Practice in Essl Foundation Report

- Specialisterne has been acknowledged as one of 27 good practice examples in the [Essl](#) Foundation's **Zero Project 2012** Report. The report is an international study on the implementation of the **UN Convention on the Right of Persons with Disabilities**.
- Commissioned by the Essl Foundation, the report is a commentary on the state of the UN Convention in 36 countries based on 21 social indicators.

A Human Rights Issue

- In May 2008, the United Nations Convention on the Rights of Persons with Disabilities entered into force.
- However, the lack of expertise on how to plan and execute policies and strategies remains a major challenge.
- Outstanding examples of political responsibility that actively promote the rights of disabled people both now, and for the future, are fairly rare.

It's Time for a Step Change



It's time to redress the balance, to ensure equality of opportunity and access, and good role modelling, to help students with disabilities engage with suitable education, training and employment. It's their human right.

In response to this shortage of policy role models

- The Essl Foundation, the World Future Council and Bank Austria have joined forces to organize an international conference in Vienna on encouraging policies that have successfully overcome social, legal, economic, political and environmental conditions that act as barriers for disabled people.

Zero Project Conference

- International Conference on Good Policies for Disabled People - 22-23 January 2012 in Vienna, Austria
- <http://www.zeroproject.org/about/zero-project-conference/agenda/>

For the first time ever

- Parliamentarians, representatives of NGOs and foundations, academics and disability rights activists will come together to discuss inspiring policies from all around the world and to find ways to promote and spread them to other countries. The conference seeks, thus, to strengthen political commitment for protecting and guaranteeing the full enjoyment of all human rights by all disabled people.

USA – no nearer – why is this?

- <http://www.autism-society.org/living-with-autism/lifespan/adulthood/>
- The first step in transition planning should be to take a look at the individual's interests, abilities and needs. For example, what type of educational needs must be met? [College](#), vocational training, adult education? Where can the young adult find [employment](#) and training services? What types of [living arrangements](#) are best? Does the individual wish to pursue [social opportunities](#)?

But, quietly, in Bratislava ...

- The Center of Social and Work Rehabilitation offers educational courses for the labour market (requalification courses) and job training with an accreditation from the Ministry of Education of the Slovak Republic:
- Traditional bookbinding, gold and silver jewellery making, single entry book keeping, computing, spooling and repairs of electromotors, car maintenance, dressmaking;
- These courses help young and adult citizens with disabilities to achieve participation in employment and the labour market.

It takes a village to raise a child

- This old African proverb offers a timeless reminder that children will thrive only if their families thrive and if the whole of society cares enough to provide for them.

A Village Path is Never a Straight One

- Rabindranath Tagore's work and writings inspired David Horsburgh, the founder of the Neel Bagh school (Horsburgh was also influenced by J.Krishnamurti and Bertrand Russell).
- Once, standing in the middle of the many paths in the campus, he quoted Tagore, telling that a village path is never a straight one because it is made over time by the feet of the people, in touch with the contours of the land.

One size doesn't fit all

- **‘made over time by the feet of the people, in touch with the contours of the land**’
- Let us imagine ... children, adults, in touch with the contours of their lives, free to follow what interests or engages them ... and then
- Education, Training or Employment which understands and engages them and then reaches out to meet their individual needs.

Sankalp Trust School Brochure says:

- “Just as a slow-moving caterpillar eventually transforms into a beautiful butterfly, we believe that children, given the right inputs, will transform into bright, confident and self-reliant young adults.
- Sankalp wants to be the cocoon for these children. A special school different from the “factory” schools of our times.”

More about butterflies ...

- Each period (of child development) is basically different from the others; nevertheless each lays the foundation for the one following it. To develop normally in the second period a person must have developed well in the first.
- In the same way the caterpillar and the butterfly are two creatures very different to look at, and in the way they behave, yet the beauty of the butterfly comes from its life in the larval form, and not through any efforts it may make to imitate another butterfly.'

Maria Montessori, *The Absorbent Mind*, 1949

Dr Maria Montessori 1870-1952



Towards a prototype for nurturing adolescents with special needs to transition successfully out of education and into employment

- This is the focus of our workshops tomorrow as we examine the current provision in India for adults with special needs
- and continue our search for a prototype for helping adolescents make successful transitions into employment!

The Development of the Adolescent Brain

- The moody, impulsive, maddening behaviour of the adolescent makes evolutionary sense as an organism learning how to negotiate its environment;
- The adaptive-adolescent view of life can be tricky to come to terms with for parents of able-minded children ... how about the most flat out, contrary, scary moments with a teenager with autism?

Take (Montessori) Inspiration

- The key to the development of the teenage brain – the clue to its clumsiness and remarkable adaptability – is the prolonged plasticity of the late-developing frontal lobes of the brain as they slowly mature;
- These are the very last to lay down the fatty myelin insulation – the brain's white matter – that speeds transmission;
- Dr Montessori's four developmental stages

Sensitive Periods for Learning

- Douglas Fields, a neuroscientist specialising in the study of myelin says, “The period when a brain lays down myelin is a crucial period of learning – the ‘wiring’ is getting upgraded, but once that’s done it’s harder to change.”
- The window in which experience can best rewire brain connections is highly specific to each brain area, and works back-brain to front

Special Brains

- As with all aspects of development for children with special educational needs, development of their brains may be delayed;
- The long, slow back-to-front developmental wave, completed finally in the mid-20s for able children, and often much later for children with learning difficulties – no wonder they don't 'wise up' sooner!

The Role of Handwork in Developing Cognition

- Neurophysiological research increasingly confirms the wisdom and efficacy of what has been called “hands-on learning.”
- Correlations have been found between dexterity and mobility in the fine motor muscles of our hands and cellular development in our brain which supports our cognitive capacities.

Hands on Learning

- Swedish neurophysiologist Matti Bergstrom: The density of nerve endings in our fingertips is enormous. Their discrimination is almost as good as that of our eyes. If we don't use our fingers, if in childhood and youth we become “finger-blind,” this rich network of nerves is impoverished—which represents a huge loss to the brain and thwarts the individual's all-around development.

The hand is the route to the brain

- If we neglect to develop and train our children's fingers and the creative form-building capacity of their hand muscles, then we neglect to develop their understanding of the unity of things; we thwart their aesthetic and creative powers. Those who shaped our age-old traditions always understood this. But today, Western civilization, an information-obsessed society that overvalues science and undervalues true worth, has forgotten it all

Sensory damage – what is the cost?

- Such damage may be likened to blindness itself. Perhaps worse, while a blind person may simply not be able to find this or that object, the finger-blind cannot understand its inner meaning and value.
- Some schools are “value-damaged.” The philosophy of their upbringing is science-centred, and schools are programmed toward that end point. . . . Such schools have no time for the creative potential of the nimble fingers and hand, and **that arrests the all-round development of our children — and of the whole community to thinking.**

Weaving the Brain Loom

- Our brain is an intricate loom of billions of neural pathways with a huge potential for weaving internal interconnections and connections out to the world.
- The name for a brain cell is “neuron” which derives from ancient Greek roots for “fibre,” “thread,” or “cord.”

From the Hand to the Brain

- When our hands interact with the world, they are not only actively sensing and transforming what is “out there” but are they are also simultaneously feeding back information to the human soul and its instrument, the brain. They are weaving the branching, thread-like dendritic connections and patterns into our nervous system which correspond to our cumulative experience.

To touch, to hold, to know, to see

- As our hands touch and play upon surfaces of outer reality, we internalize and inwardly fabricate a personalized tapestry upon the multi-dimensional loom of our mind. The richer and deeper these experiences are, the more *meaningful* the world can potentially be for us. The word “meaningful” is derived from the Old English root *maenen* “to have in mind or memory.” We come to have the world in our minds, but first, we often have to have it actively in our hands.
- Furthermore, we become “interested” in things. The Latin *interesse* literally means “between to be;” between child and world is established a linkage, a bridge, a template, an inner patterning that corresponds to the world.

Partnerships with Parents

- Parents of children with autism know better than anyone else what educational and public services their child needs. They also know the deficiencies of the system and the frustrations encountered while trying to obtain such services.
- Ashok will talk more tomorrow about parents being pushed from pillar to post ...

IPSEA

- There are many advocacy facilities in the UK for parents of children with special needs;
- *Constructive Campaigning for Autism Services* is an essential guide to effective campaigning for appropriate services for children with autism, written by PACE (The Parents' Autism Campaign for Education).
- IPSEA also has many useful guidance sheets in the UK: <http://www.ipsea.org.uk/>

Autism and Employment

- Caring for a child with autism (or other special needs) presents a roller-coaster of challenges and joys. Many parents find it difficult to come to terms with their child's diagnosis and find that caring for a child with autism places significant emotional and physical pressures on them.
- Anecdotal evidence suggests that the majority of mothers leave work or reduce their hours to provide support for their child.

Impact on Parents

- Less is known about the impact that caring for a child with autism has on a parents' ability to maintain employment, the barriers they face in balancing care and employment, and the factors that influence their employment decisions.
- With an estimated 535,000 people with autism in the UK alone, the social and economic impact is staggering.

The Impact of Motor Development on Social and Cognitive Outcomes

- The impact of the development of motor skill on mental, psychological and physical health is profound.
- There is a complex link between motor and language development from infancy and this is detailed in Dr Montessori's book *The Absorbent Mind* in Chapter 14.
- Studies comparing children and adults have found that walking and balance are more affected by the addition of a cognitive task in children (e.g., Schaeffer et al., 2008; 2009), suggesting that motor control requires greater attention during infant development than it does in later childhood.

Equilibrium

- Children who need to focus even more on maintaining balance and control over their actions may not have sufficient ‘attention resources’ to allocate to cognitive tasks, and may therefore develop atypical ‘embodiment’ or interactions with their environment (Mareschal et al., 2007) – autistic ‘stimming’.

Motor skills and social interactions

- Loco-motor experiences, including crawling and walking also affect the extent to which perceptual and social information is used to guide physical exploration of one year old children when navigating a 'risky' environment
- Learning to sit upright and to manipulate objects affects how infants attend to and process faces. The critical role of the motor system raises a challenge for many psychologists who have tended not to address the motor system within research into cognitive development.

And finallyDyspraxia

- Children and adults with dyspraxia experience difficulty with motor skills and executive function and can mask underlying good cognitive ability.
- The biological and cognitive mechanisms underlying this disorder are discussed in detail tomorrow in Workshop 2: Five Basic Movement Skills

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www.appga.org.uk/Resources/Past-Reports.aspx
- *Constructive Campaigning for Autism Services: The PACE Parents' Handbook*, (2005) Jessica Kingsley Publishers

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- *The Hidden Hinge: Self Development in Early Childhood the Montessori Way*, R.C. Packard, (1972) Fides Publishers, Indiana

Resources

- Special Educational Needs Code of Practice 2001:
- <http://media.education.gov.uk/assets/files/pdf/s/sen%20code%20of%20practice.pdf>
- SEN Code of Practice Guidance:
- <http://www.education.gov.uk/childrenandyoungpeople/sen/sen/guidance/a0013160/the-sen-code-of-practice>

Resources 2

- The SEN Tool Kit:
- <http://www.education.gov.uk/childrenandyoungpeople/sen/sen/guidance/a0013144/sen-toolkit>
- Summary of schools' statutory responsibilities under special educational needs (SEN) legislation
- <http://www.education.gov.uk/childrenandyoungpeople/sen/sen/guidance/a0012807/summary-of-schools-statutory-responsibilities-under-special-educational-needs-sen-legislation>

Namaste!

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