

PRESS RELEASE

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SUMMARY: ICT and the EARLY YEARS FOUNDATION STAGE (EYFS)

On Wednesday 30 April, internationally respected Psychologist **Dr Aric Sigman**, author of the book *Remotely Controlled*, spoke to a packed audience of 200 people in Stroud, looking at the harmful effects of televisual technology – ICT – on young children. Children have never watched so many TV screens at such early ages and for so many hours per day. Whilst those with a vested interest in propagating this child-inappropriate technology claim that these new forms of screen media are good for children, reputable scientific research paints a very different picture. Whether in the classroom or the playroom, TV screens are increasingly considered a serious health, developmental and educational issue.

Dr Sigman's talk carefully described the latest research in this area, linking directly to what is a growing national scandal - the government's new early-years curriculum, which is imposing, by legal statute, televisual technologies which are demonstrably harmful to young children. Dr Sigman's arguments are entirely consistent with the well publicised concerns of the 'Open EYE' campaign for early childhood, whose campaign against the learning and development requirements of the new framework has been gaining momentum and support from across the country since its official launch last November.

THE SCOURGE OF COMPUTERS IN EARLY CHILDHOOD

“Computer use too early has long term, detrimental effects on children's maths and reading. Early exposure may have long-lasting adverse consequences for educational achievement.” These are the latest research findings from foremost expert in the field, internationally respected Psychologist Dr Aric Sigman.

Scientists and childhood campaigners in England are seriously alarmed that new government early years legislation (in the form of the impending Early Years Foundation Stage, or EYFS) mandates that *all* children, in all nurseries or care settings, *must* be introduced to computer technology, starting at 22 months of age. **No settings will be excepted.**

In a new report specially written for the 'Open EYE' campaign, Dr Sigman's urgently recommends educators to: “Keep computers and televisions out of the classrooms and especially not in nurseries at a younger age.”

EYFS spokespersons objected to Sigman's earlier reports, stating that children find the ICT interactions 'fun', implying therefore that they are good, and that these are part of the 'real world' that children should be introduced to. This is the type of 'evidence' that politicians are using to rationalise computer use for all children in pre-school, with mandatory ICT assessments. But, Sigman notes, in doing so they are not listening to educators or scientists. An extensive Harvard Medical University study which Dr Sigman quoted, for example, concludes that “TV viewing is exactly the opposite of what children need for their development,” and, significantly, that ‘whether or not children like a programme or find it fun has no relevance to the serious effects that viewing can have on brain development.’

BACKGROUND: ENGLAND'S NEW EARLY YEARS 'CURRICULUM'

In September 2008, the new early years 'curriculum' becomes a legal requirement for every nursery, childminder and reception class in England, in both private and state sectors. Practitioners will have to monitor every child's progress against 69 'early learning goals', and more than 500 developmental milestones. Recommendations include ITC skills, writing and punctuation awareness, and some mathematical knowledge. Since the system will be monitored by Ofsted, and failure to comply could, *in extremis*, result in school or setting closure, there is overwhelming pressure upon child minders to focus on providing information rather than on the care and nurture of their children.

Over the past decade, England's ranking in international reading literacy league tables has fallen from 3rd to 19th - a trend which researchers have substantially attributed to the increased use of video games.

Dr Sigman identifies a yawning gulf between the advocates of ICT in early-years education, and the dire warnings which a stream of reputable research studies is unambiguously highlighting. If the research reviewed by Sigman is even remotely accurate, then the ICT goals for young children in the new compulsory EYFS legislation will inevitably place under grave threat the health of England's youngest children.

GOVERNMENT-IMPOSED 'TODDLER TECHNOLOGY'

Dr Sigman's exhaustive compendium of research on the subject illustrates just how exposure to screen technology during the key developmental stages of childhood can have a negative impact upon cognitive processes and learning. Yet the government is flagrantly ignoring this mounting research evidence and have put ICT targets in EYFS – enshrined in law.

The 'learning goals' in the new EYFS legislation will make it mandatory for all nursery or care settings to assess each child's achievements in the use of Information and Computer Technology. By 40 months (or just over 3 years of age), children should be able to use a mouse and keyboard technology, and teachers "should provide a range of programmable toys, as well as equipment ... such as computers" (quotation from the published EYFS legislation).

DAMNING RESEARCH FINDINGS

These unprecedented developments fly in the face of studies showing conclusively that screen-based education is less effective than person-to-person interactions, and that even so-called 'educational' DVDs might well retard children's language development.

Moreover, studies showed that screen viewing at an early age leads to a significantly increased risk of attention problems, even into adolescence. The addictive nature of these technologies could affect some children for a lifetime, with the use of screen technology for nursery-age children encouraging a lifetime of televisual screen dependency.

AFFIRMATION FOR THE 'OPEN EYE' CAMPAIGN

Richard Brinton, Principal of Hawkwood College and a founding member of the 'Open EYE' campaign, said that Dr Sigman's lecture lent further urgency to 'Open EYE's modest plea for the government to reduce the status of the EYFS learning and development goals to voluntary professional guidelines, from their current mandatory status.

Brinton added, 'The government appears to have leapt onto an increasingly discredited IT bandwagon that is not only embarrassingly out of date, but could well be harming a generation of children. Schooling is not compulsory until over 5, yet the government is forcing nurseries and care-givers to follow the government line on learning and development, including the goals for use of computers and IT. Something is quite fundamentally wrong about these developments.'

'Nurseries should be placing play and social relationships at the heart of their practice – to lay the appropriate foundations for later formal cognitive learning.' Brinton added. 'It's the warmth and joy of human relationships, in play amongst themselves and with caring adults, that should take centre stage in children's early development.' It is experiences such as these that nurture the child's social skills, emotional competence and brain development, Brinton maintains, whereas computers have been shown to have quite the opposite effect, making social interaction more difficult later.

'OPEN EYE' CAMPAIGN GAINS MOMENTUM

The 'Open EYE' campaign has gained nationwide attention, and their petition on the Downing Street web-site already has over 6700 signatures. Signatories include such luminaries as Steve Biddulph, Margaret Forster, Professor Lilian Katz, Penelope Leach, Sue Palmer and Philip Pullman. Parliament has also been acting: the 'OPEN EYE CAMPAIGN FOR OPEN EARLY YEARS EDUCATION' parliamentary Early Day Motion has now 62 MP signatories. Nurseries and childminders alike around the country have also been voicing their concern about the EYFS educational requirements. Disturbingly, some teachers and administrators have been reported to be fearful of losing their jobs if they were to speak out honestly against aspects the EYFS.

'Contrary to a series of misleading reports, the Open EYE campaign is by no means challenging the EYFS legislation in its entirety, and has made this clear from the outset', explains Dr Richard House, a Senior Lecturer in psychotherapy at Roehampton University and member of the campaign's Steering Group. 'Rather, we are making the comparatively modest plea that the learning and development requirements of the EYFS be given the advisory status of voluntary guidelines. This change will allow practitioners in nurseries and care settings to pursue the educational approach and learning milieu they believe is most appropriate for their children. Despite repeated petitioning of the minister on this issue, no satisfactory explanation has been given as to why the government is clinging on to this divisive and unnecessary compulsion, the rationale for which so many parents and practitioners are now questioning.'

NOTES

Major 'Open EYE' points of concern are as follows:

(1) **TOO EARLY LITERACY.** Einstein began to read at 8, but for most children, this developmental window is open by 7. Once children are developmentally ready, children learn quickly and easily, whereas if taught too early, they can experience difficulty and a paralysing sense of failure. There is also evidence that inappropriate early learning can impair subsequent intellectual abilities. Ironically, those who suffer most from premature early cognitive learning are the disadvantaged, who are in most need of a solid foundation in socialisation, listening, speaking, and fine motor skills, before facing the demands of reading and writing.

(2) **SUPPRESSION OF AUTHENTIC PLAY.** While EYFS purports to emphasise play, its notion of play is adult-centric and directive, which negates the concept of child-initiated imaginative play (see below).

(3) **AN 'AUDIT CULTURE' IN THE EARLY YEARS?** Forcing 'audit culture' values and practices on to early-years practitioners, with the formers' stultifying bureaucratisation and anxiety-generating practices, cannot but compromise children's early-learning experiences.

(4) **'ASSESSMENT-MINDEDNESS'** THE mindset of compulsive observation and assessment that saturates the new framework will encourage practitioners to 'drill' or prepare children for the assessment procedure. This **always** happens in human organisations, so contradicting the reassuring ministerial rhetoric that seeks to claim otherwise.

(5) **COLLATERAL EFFECT ON PRACTITIONERS.** The effect of the EYFS on practitioners will be to create a 'developmental obsessiveness' and an accompanying mechanistic utilitarianism that degrades children's experience of time and space, and of genuine freedom, wonder and reverence for life. Indeed, there are already clear signs that this is happening around the country as settings prepare for the introduction of the EYFS.

(6) **STATE-DEFINED 'NORMALITY' IN CHILD DEVELOPMENT.** In EYFS the state has defined its own paradigm of what is 'normal' development (contrary to Piaget), and compulsorily enshrined its model in law - a flagrant misuse of political power.

(7) **HUMAN PARENTAL RIGHTS.** The compulsory EYFS applies to private/independent schools, nurseries and child minders as well as to state institutions, denying parents' rights to choose the care and learning environment they wish for their young children. Under European law, this is an infringement of parental, and therefore human, rights.

EARLY-YEARS LEARNING AND PLAY

GRETHE HOOPER HANSEN, Educational Consultant and founding member of 'Open EYE', writes:

According to Jean Piaget, the period from 4 to 7 is for *pre-operations*, meaning that children set in place bodily, sensory, emotional and imaginative functions that are later adapted for higher ones: senses and imagination prepare neural networks for abstract thinking. In the brain, then, higher depends on lower. Hence the education process begins at 7, and this is standard practice in the Nordic countries - world leaders in literacy standards. When taught too early, cognitive skills take precedence, shutting down the essential foundation building. For this reason, German state kindergartens (0-7) avoid all cognitive work such as reading and writing. At this stage, what children need is free, imaginative play.

Play is nature's ingenious way of developing the child's mind. Simple on the surface, it is the complex organic means to developing and evolving consciousness. We have natural abilities and genetic inheritance to be developed, and nature will do that provided adult consciousness does not get in the way. A child at play has no fear or doubt, launches into adventure with joy, and just lets things happen. In effect, this primes the mind with positive expectation and gives nature a free hand. Make-believe is enactment without limits; the players define their own game, trialling anything they choose, taking risks without fear of consequences, which allows nature to develop their self-reliance and independence as well as functions and skills. In the same way, connection, sharing, trust and laughter lead on to social and collaborative abilities.

Play is also vital for psychological survival; through it, children find and define who and what they are. Without it, they can lose their sense of meaning and purpose in the world. It activates imagination, the creation of new images that are not attached to real people or things, broadening and deepening thinking and teaching the mind how to fly beyond the bounds of its previous experience. Because all this is managed by nature, it is perfectly adapted to the child's need, providing the right thing at the right time. This can happen only if the child is free from adult control. Notwithstanding ministerial rhetoric and good intentions, the EYFS will, *in practice*, force carers to suppress and prevent truly authentic play.

Wales confronted the early-years situation some years ago and engaged in a profound re-examination of the educational culture. Former education minister Jane Davidson sought advice from many sources and spent time in Cuba, New Zealand, Denmark, Germany and Italy in order to learn how other countries tackle early childhood experience. In 2004 her plan was piloted in 41 schools, reviewed in 2005 and extended to a larger test group. Meanwhile, carers were being prepared with degrees in the psychological handling of children. *EYFS Wales* goes national in September this year, and is quite different from ours: genuine creative play, supported by adults trained in how to *let children lead*, with emphasis on emotional (not cognitive) development, and much time spent outdoors: see www.wales.gov.uk/foundationphase

However, since there is still centralised control, how well it works over the years will continue to depend on the quality, attitudes and knowledge of politicians at the time.

An additional report follows:

THE EFFECT OF SCREEN VIEWING

ON THE DEVELOPING BRAIN

A TALK BY DR. ARIC SIGMAN AT THE SPACE

On Wednesday April 30th there was standing room only and a queue to the High Street when Dr. Aric Sigman gave his warning about the adverse effects of screen technology on the growing brain.

Children so young, he said, have never spent so many hours a day watching TV and computer screens. An American Medical Association report said that by 24 months 90% watch TV and videos. By age 6, children have spent a year of their lives in front of a screen.

And that 11-15 year olds spend 7 1/2 hours a day at it alone in their bedrooms.

After a 26-year study The Lancet has reported that watching for two hours a day results in raised cholesterol levels, obesity and poor cardio-respiratory fitness.

Watching TV slows the metabolic rate, leading to diabetes. It disrupts hormones, causing sleep problems – it lowers melatonin which is needed for healthy sleep. In the long term lower melatonin brings on puberty earlier, especially in girls.

The American Academy of Paediatrics found that screens have negative effects on children's brains:

limited neurological activity and reduced cerebral blood flow. The frontal lobe is stunted and the wiring of the brain is changed, affecting the attention span,

learning and sociability.

The Journal of Paediatrics also suggests that early TV viewing leads to ADHD at age 7.

NATURE magazine reported that TV raises the dopamine level – the constant attentional shifts give a 'kick' that is hard to match in real life. Children then

find people, school and books boring. This leads to poor academic performance.

Comics are the most popular reading matter for children now – they give an instant ‘hit’ with pictures, they don’t have to use their imaginations.

The Journal cited above also found that baby DVD’s can retard language development, the opposite of what they claim to do. Young children who didn’t watch baby DVD’s learned to speak sooner. Harvard Medical School sent out the message: ‘Say NO to Teletubbies.’

And yet our Department for Children, Schools and Families has said: “We see the box teaching the book in the widest sense imaginable.”

In addition to the physiological and cognitive effects listed above, there is the subject of content. Viewing violence excites the frontal lobe and lowers impulse

control (viz the shootings in schools in America, Germany and Finland). The changed brain leads to pathological aggression “caused by watching virtual violence” (Brain Mapping). Relevant emotional responses are suppressed, causing a violent but unemotional response to life (copycat violence).

Dr. Sigman said that ‘social networking’ leads to depression and isolation, especially from the family. The BBC has a plan to promote ‘social networking’

with 6 year olds.

He said that age and the number of viewing hours were what mattered; quite apart from the content, the medium itself does the damage. Watching for

just an hour and a half a day causes brain changes. And most children watch at least twice this. Watching screens is now a major health issue, like junk food (Journal of Paediatrics). Dr. Sigman recommended a buffer zone: delay it as long as possible and never put a screen in a child’s bedroom.

The next day he flew to Sumatra to study the impact of TV on village life. He has done this in Tonga, Timbuktu, Siberia, Korea and Bhutan, and found that the advent of TV always rent the fabric of the culture.

The young no longer listened to the wise stories of the elders, and the teenage boys now burgle houses, slouch cynically and walk tough – all of which they have

seen on American TV.

