



CURE OR QUACKERY?

A multi-millionaire claims he can help children with learning difficulties. Experts say he's just out to make a fast buck. But one mother's search for the truth produced surprising results.
By Caroline Scott. Photographs by Anna Kari



A couple of weeks after Felix started school, aged four years and one month, his reception-class teacher, bristling with the zeal of the newly qualified, took me to one side to share some concerns. Felix fell over things, she explained. His concentration was poor, he was easily distracted and he had weak hand-eye co-ordination. In class he seemed tired, often lolling on the floor, and he had difficulty following simple instructions. If you asked Felix to go to the table and find a pencil, by the time he'd got there he'd have completely forgotten what he'd been asked to do.

I wasn't particularly co-operative. To me, my four-year-old was a baby in school uniform. He was tall for his age – no wonder he tripped over. And if he couldn't sit still, I wasn't surprised. He'd never before had to share a mat with 29 others. Nine years down the line, and a thousand parent consultations later, I'm a little less sanguine.

In reception classes all over the country, dyspraxic children like Felix are starting school this month. Just as common but less well understood than dyslexia, dyspraxia is thought to affect up to 10% of the population, and twice as many boys as girls. Also known as developmental co-ordination disorder (DCD), it is defined by the Dyspraxia Foundation as “an impairment or immaturity of the organisation of movement”.

In other words, your dyspraxic child is “clumsy”, a word that seems to have humiliation and despair stamped through it like a stick of rock. So I'm going to leave it there and not refer to it again because, believe me, these children have enough to deal with. Children with dyspraxia are often labelled as lazy, or “not trying”. In fact, they have to work twice as hard to do what comes naturally to everyone else, because absorbing and

sorting information doesn't happen automatically. They listen but they don't engage. They hear, but five minutes later they can't remember. When hours of extra lessons in literacy and maths fail to produce results, teachers don't know what else to suggest.

Essentially, dyspraxia is a neurological disorder resulting from parts of the brain failing to mature properly. Diagnosis is often delayed because every child with co-ordination disorders is different. Many dyspraxic children also suffer from dyslexia (difficulty in learning to read and hence writing), while 60% of dyspraxic children also have ADHD (attention deficit hyperactivity disorder). Some have Asperger's syndrome too.

Dyspraxia is actually a constellation of problems. As well as poor balance, posture and co-ordination, dyspraxic children have underdeveloped fine-motor skills, which make writing and drawing a misery, while poor short-term visual and verbal memory makes copying from the board almost impossible. A dyspraxic child may still be finding his place while the rest of the class has moved on. In younger children, a page of handwriting looks like an endless stream of upper- and lower-case letters with no spaces. This is because dyspraxic children have poor "right brain" spatial skills; they can't judge where the pencil should land on the page. They rarely use punctuation and most spell phonetically. The older child eventually progresses to a hesitant scrawl, his good ideas ending up in a frustrating tangle. By now, to use Felix's words, he feels he's "crap at everything". He's learnt that he might as well lessen the agony by writing as little as possible.

Simply processing information requires unimaginable effort for these children, so they are often exhausted by the end of the day. They find it impossible to concentrate for more than a few minutes and they have lousy organisational skills. It is the dyspraxic child who turns up late for lessons – they have no sense of time – without the right books, having lost his jumper. His gait is awkward, and as he sits down his upper body flops and sags into his chair. As the lesson progresses, he'll be easily distracted, and repeatedly told off for talking, or scrabbling around on his desk, or banging his feet or fiddling with his clothes, his brain desperately seeking sensory input. To the teacher, this kind of nonsense is obviously unacceptable, and the behavioural problems of many undiagnosed dyspraxic children see them excluded from the classroom altogether.

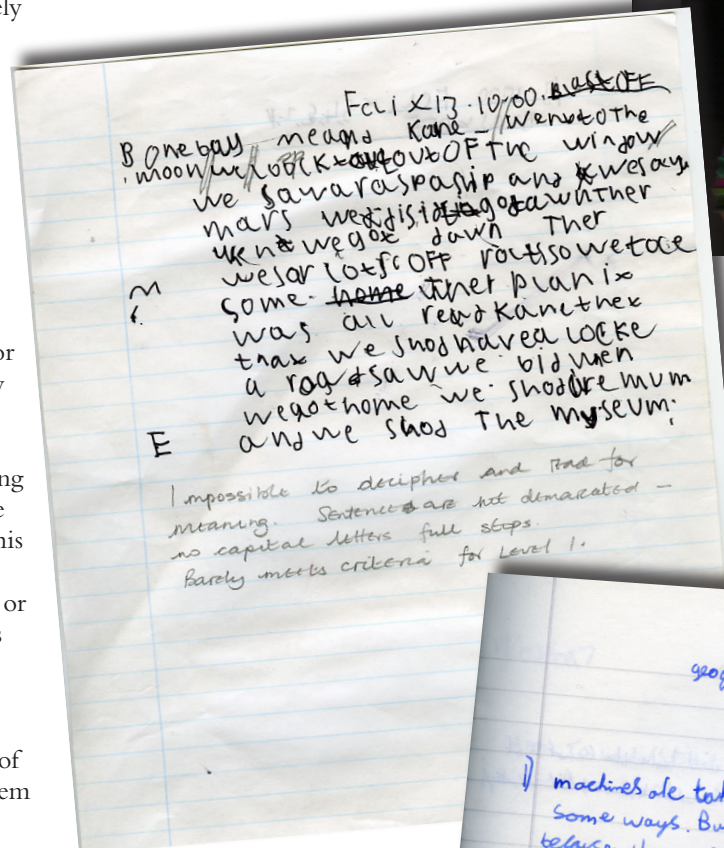
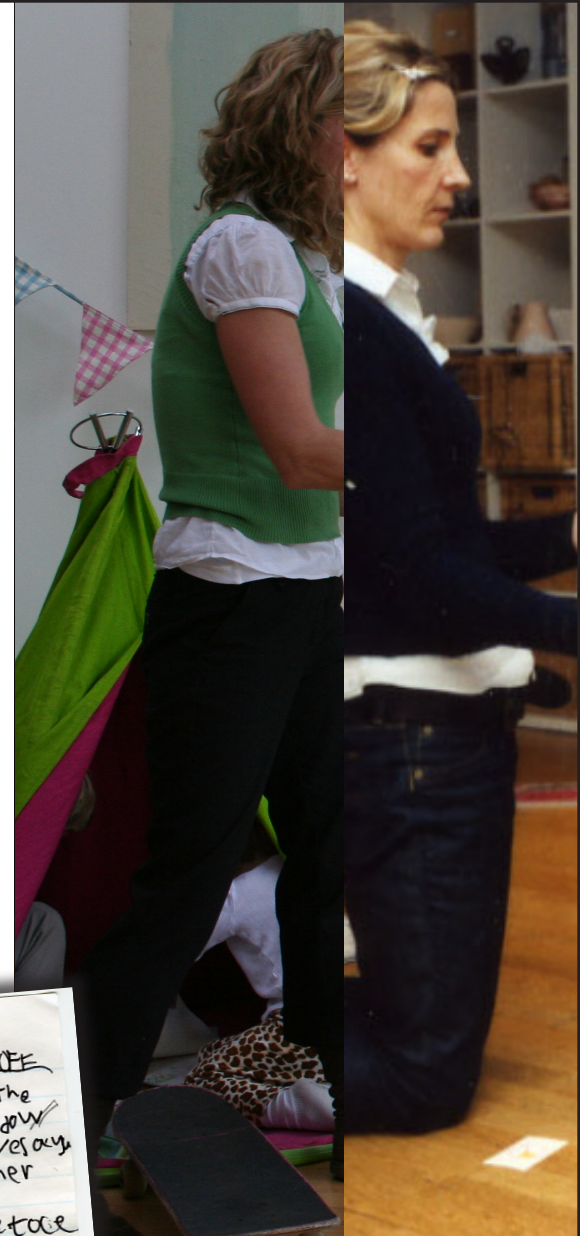
And long-term follow-up studies show that these children do not simply "grow out of it". A high proportion – 80% of 22-year-olds in one study – develop drug or alcohol problems or mental-health difficulties.

A clinical audit in Cambridge nearly 10 years ago established an urgent need to improve the recognition, referral and treatment of dyspraxia across the county. Above all, it called for a better understanding of the condition among health-service and education professionals and

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especially parents, who struggle with contradictory advice. Growing evidence indicated that physical therapy at an early age could make a huge difference. The College of Occupational Therapists even suggested that treating dyspraxia could become their key contribution to the government's initiative Our Healthier Nation: Healthy Schools.

Six years later, in 2002, the college, still concerned at the management of children with DCD, published a survey of waiting lists across the UK. It found that children with dyspraxia and other motor disorders were considered "low priority", and called again for government funding for long-term studies on the effectiveness of different interventions. Again, it fell on deaf

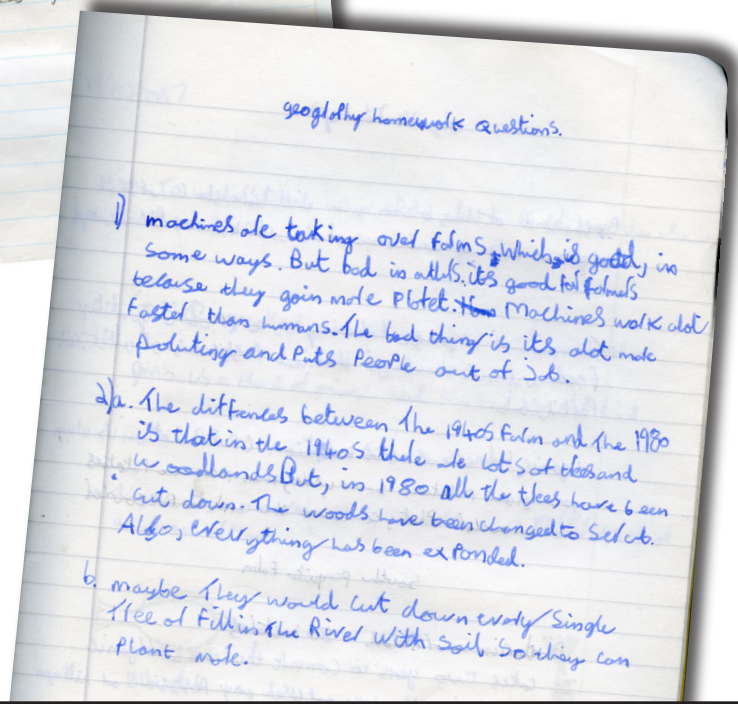


Felix after 2 weeks treatment

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Felix aged ??

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ears. The budget simply doesn't stretch. Each occupational therapist has on average a caseload of 96 children, with a further 22 waiting for assessment. Waiting time for children with dyspraxia ranges from seven weeks to five years.

Now 13, Felix was recently referred by our GP to an occupational therapist (OT) because he was suffering from persistent headaches. "Really, I shouldn't see him, as he's already at secondary school," she said. But as we'd waited so long, she agreed to give him an assessment. She was able to recommend a special sensory cushion to stop him jumping around in his seat, and a slanted board to make writing easier. "If I'd had Felix much earlier, a structured exercise programme might have made a real difference," she said cheerfully. "But I'm afraid in order to control the waiting list, NHS provision stops at seven." Felix wasn't formally diagnosed until he was eight.

Let me introduce you to eight-year-old Felix. At eight, his confidence is at an all-time low. He is on the Register of Special Needs. He is in the lowest set for literacy, handwriting and maths. His books are full of letters tightly pressed together without breaks between the words. Ordering information is causing him huge distress. He is distractible, disorganised and slow. He cannot tell the time. His teacher feels that his written work "doesn't reflect his ability and



Pic to come

The College of Occupational Therapists even suggested that treating Dyspraxia could become

understanding". Felix feels he "isn't clever" and his head is "all messy". The school has set up a buddy system. One of his best friends reminds him where he should be and what he needs to have with him. An educational psychologist finds that he is of above average intelligence – his reading age is 10 years and 9 months – so it is unlikely that his lack of progress can be blamed on an inability to understand and learn. His mother spends her evenings looking up quackish-sounding treatment programmes on

the internet, the evidence to prove the efficacy of one contradicting the next.

Although the Dyspraxia Foundation estimates that there is "at least one dyspraxic child in every classroom requiring access to a specific treatment programme", nobody seems able to agree what that should be. The strategy of the DfES (Department for Education and Skills) is to place children on the Special Needs Register. But unless they qualify for a Statement of Special Needs, and thus a possible fast track to speech and occupational therapy, the only help they're likely to get is whatever learning support the school can provide. It was Felix's own defeated response – "Face it, Mum, I'm just dumb" – that kept me looking for alternatives.

He and I are now veterans of what I must call the Learning Difficulties Industry. We've tried brushing (stimulating sensory-nerve pathways with a fine paintbrush, which is supposed to wake up dormant nerve cells), we've tried meditation and tai chi. We've tried – God help us – Kumon maths. We've had homeopathy and osteopathy (for the headaches) and finally arrived at the Dore programme, which is where we are now. For the past nine months we've done a series of exercises morning and evening, and I don't know which of us finds them more torturous. Me: "It's only a few minutes..." Or him: "You're trying to ruin my life..." You get the picture.

The Dore programme is based on a theory that learning difficulties are linked to a delay in the development of the cerebellum, a tangerine-shaped organ at the base of the brain responsible for co-ordination and balance. A series of daily exercises is designed to stimulate the neural connections that link the vestibular (inner ear), cerebrum (thinking brain) and the cerebellum (hind brain), which then co-ordinates the memory, emotions, muscles and senses. The theory is that, when a child throws a beanbag in the air and tracks it with his eyes, while balancing on a ball and reciting his six times table, the brain uses different neural networks to complete each task effectively. As the difficulty of the task increases, the number of neurons the network requires also increases, thus constantly building more extensive neural networks. Every six weeks, high-tech testing equipment monitors the child's progress in balance and eye-tracking, and provides the parent with comforting data.

Wynford Dore, the businessman behind the programme, made his millions developing fire-protective paint. He is also the father of a child with serious learning difficulties whom even the best schools could not help. When his daughter tried to take her own life for the third time, he poured his considerable financial resources into trying to help her. Scientists, mostly from the "phonics" camp, have taken huge exception to his approach. They claim Wynford is out to make a fast buck, trading on the flakiness of vulnerable parents, who pay around £2,000 for the promise of a cure. Scientists don't like the word "cure", and positively reel from the word "miracle", but with characteristic disregard, ➤➤➤ 39

Wynford, on the back of an apparently successful trial at Balsall Common School in Coventry, has called his latest book *Dyslexia – The Miracle Cure*.

Yet very little in the Dore programme is new. With his muscle and wealth, he has simply revisited a known concept (some of the first Dore exercises were based on occupational-therapy regimes for stroke victims), researched, packaged and marketed it for the modern parent, who, in the absence of anything else, is only too glad to hand over her credit card.

It was Jean Ayers, an occupational therapist and clinical psychologist working in California in the 1960s, who first noticed that children struggling with motor co-ordination also often had learning difficulties. Ayers believed that these children had a neural disorder which meant they couldn't properly organise the sensory input received by the nervous system. Working with children with subtle but definite cognitive difficulties, she designed a range of movement techniques to stimulate the vestibular system, an approach that transformed paediatric occupational therapy. Ayers also saw that when the vestibule is underfunctioning, the child will move around continuously to make up for the lack of auditory stimulation. But her theory was either accepted with absolute enthusiasm or rejected entirely. "It is believed to be omnipotent or no good at all," she complained. "And knowledge simply doesn't develop that way."

Above the Dore camp, predictably, the same storm clouds are gathering. Maggie Snowling, a clinical psychologist at the University of York, and a staunch believer in the phonic (sound-based) approach to learning difficulties, believes Dore's peer-reviewed Balsall Common School Trial, which was published in *Dyslexia* magazine, isn't worth the paper it's written on.

"The statistics are wrong," says Snowling, who has herself just received a £1m research grant from the Wellcome Foundation. "It's full of glaring methodological errors. We don't know if the school offered everyone involved a pay rise or if parents came in and read with children, because there was no external control. On top of all that, the results they did get were minuscule compared to the effects you'd get from a specific reading-intervention programme. Targeting motor skills isn't going to get anyone reading."

"Maggie Snowling is not a nice piece of work," counters Dr Roy Rutherford, Dore's medical adviser and the principal architect of the programme. "She's a bullying, very aggressive lady, and people are frightened of her..." Basically, she's spent 20 years researching the phonic method, which has thrown up some dismal results, and she's very threatened by us."

It's really quite nasty out there in the world of science. Huge egos jostle for recognition and



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precious research grants. Dr Madeleine Portwood, a highly respected Durham-based educational psychologist and author of several books on dyspraxia, confides that not only have the results of her own clinical trial into the value of long-chain fatty acids been hijacked by another scientist, but at one point her mobile-phone in-box was filled with juicy accusations of a distinctly unscientific nature.

Another scientist, who declined to be named, suggests the entire learning industry has a lot to lose if it turns out that Winford Dore is right. "Parents will do anything they think will help their child. The combined turnover of the Dyspraxia Foundation, Dyslexia Action and all the other bodies, including the drug companies, which make money out of learning difficulties must run into millions, and a lot of jobs are at stake."

Rod Nicholson, professor of cognitive psychology at Sheffield University, who has been researching cerebellar-development theory since 1995, and who is on Dore's payroll, refuses to enter the fray. "We should be combining everything we know. There's been some very encouraging work suggesting omega-3 in fish oils might help some children. We know that kids who can't read also need learning support and that phonics can be incredibly helpful. Chances are, in five or 10 years, we'll have

combined all the best methods – that might be fish oils for some children, a combination of phonics and exercises for others. Pulling each other apart will stop that work proceeding."

The fact is that suspected developmental co-ordination disorders are increasing exponentially. Children are less active now than at any time in modern history. They walk less, play fewer sports and have less freedom to roam outside. Computer games are now marketed for toddlers as young as a year old. They're sold on the idea that they encourage early number and letter recognition, when in fact they may actually be damaging children's ability to learn. Skills such as reading and writing require complex co-ordination of both sensory and motor systems – and children who haven't acquired sufficient motor-sensory integration are going to struggle. Some nurseries report that around half their intake display gross and fine motor delay. In Scandinavian countries, children are engaged in active play far longer – most don't start school until seven – and dyspraxia hardly exists there.

Madeleine Portwood, who is researching the link between behavioural and emotional difficulties and neurological immaturity, has pioneered a scheme to screen for dyspraxia in all schools in and around Durham. Using £35,000 from her Early Years budget from the DfES, she employs two special-needs support assistants to cover the county. "We recently screened 4,000 nursery children and found that 57% didn't reach the expected motor co-ordination level. If we don't intervene with a structured movement programme for three-year olds nationally, we'll end up with a race of hyperactive children."

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Around 1964, Dr Frank Belgau, then a young teacher in a Texas middle school, noticed that the pupils who found it hardest to concentrate, who were in the lowest sets for maths and

reading, also seemed generally floppier and less co-ordinated than their classmates. He suspended a ball in his classroom and encouraged pupils to try to hit it while tracking its movement with their eyes. Every morning they practised exercises together, throwing beanbags and standing on a balance board, and slowly Belgau started to notice a difference in their written work. "The children who had seemed the most challenged previously became my most promising students."

For a time, Belgau was the director of the Visual and Motor Perception Laboratory at the University of Houston. "I became the go-to guy for anyone who had a kid with problems." Through his trial-and-error research with these children, he honed an exercise programme he called Balametrics, using a special balance board, beanbags and a pendulum ball. "I learnt that precise physical activity permanently changes the brain. Continuously adjusting to higher levels of balance will speed up brain-reaction time, and that is a very important concept. Everyone can use the exercises to sharpen up, but those who experience the most change are individuals with learning deficiencies."

When Belgau's Balametrics was used in a pilot education study in Seattle from 1986 to 1988, IQ scores increased an average of 24 points, and academic scores in reading and spelling increased an average of three grades.

Now in his eighties, Frank Belgau still carves

his beautiful balance boards in Baltic birch by hand in the garage of his Washington home. He visits families personally, and regularly lectures for the American Association of Occupational Therapists, by whom he is accredited. His work continues abroad in the form of the Learning Breakthrough Programme, run by the businessman Louis Weissman, who was himself an attention-disordered child. For around £250 (\$498), Weissman will FedEx the programme, complete with a CD featuring Belgau's son, to your door. Over the years, others have plagiarised Belgau's pioneering work, but his reaction is unusually generous. "Despite never having been credited or paid a dime, I'm glad people are doing something with my work, because what really matters is that we help these children."

Dr Harold Levinson, the New York-based neurologist who first linked learning difficulties to poor neural connections between the cerebellum and the inner ear, and whose work was lifted in spades by the Dore programme, is less generous. "That guy [Dore] did things that were irresponsible and immoral. He originally offered to help develop my business. He stole my staff by offering them more money. He took over all my research, took over my patients, then made arrangements to exclude me from the whole thing. Everybody is bribed one way or another.

"Don't be taken in by the fact he is already a multi-millionaire. He wants to be a multi-

billionaire." Dore denies this emphatically.

In England, Sally Goddard Blythe, of the Institute of Neuro-Physiological Psychology (INPP) in Chester, also reports a visit from Dore's medical adviser, Dr Roy Rutherford. INPP was established in 1975 by Dr Peter Blythe, who pioneered research into neuro-developmental delay. Blythe based his life's work on the belief that specific learning difficulties occur as a result of the body failing to suppress primitive reflexes. The exercises prescribed are designed to stimulate an immature central nervous system, and are remarkably similar in structure to the Dore programme. In a study in 2004 at Swanwick Primary School in Derbyshire, the group doing INPP exercises made three times as much progress in reading as those in the control group. But Blythe admits the system doesn't work for everybody. "We see such a huge variety of problems, it is incredibly difficult to conduct accurate research. The problem I have with Dore is that it doesn't seem to identify the families for whom the programme is not appropriate. It is sold as a cure-all, and I don't think any system can claim that."

INPP has treated several thousand children and trains around 10 independent practitioners each year but, like Dr Levinson and Frank Belgau's Learning Breakthrough Programme, it can't compete with Dore in terms of marketing and PR. There are 31 Dore centres around the

said it, and would have you do up their ties and put on their socks in the morning while they sleep on, were you so willing. He shows no improvement in any of the above areas, but after nearly a year on the Dore programme, I do notice he has greater confidence and a developing sense of himself. He is holding his own at school and is less likely to kick off pointless arguments at home. He no longer says "I'm rubbish at everything" when the going gets tough. He seems able to retain more of the information he's learnt, and is getting better results – an unheard of 9/10 in a French test two weeks on the trot, for instance. His half-term grades last year were: history 30%, French 33%, maths 34%. This year they were 59%, 80%, 68%.

These results could be explained away in any number of ways. Dore's detractors would almost certainly put the increased self-esteem down to the quality time and attention he's had from his mother. I don't think so. Felix's exercises have been the single greatest source of conflict in our house for the past 11 months, and the only reason he does them at all is because he's paid in top-ups for his mobile phone.

The nice lady at the Dore programme notes that his eye-tracking swoops in an almost perfect curve rather than jumping around as it did before. Whether this is because his eye-tracking has improved or he's just got better at doing the test, I cannot tell. She says: "We are very pleased with

world, with more planned in the US and India.

In Durham, children with dyspraxia get structured-movement programmes free from the age of three through to secondary school. Dr Portwood favours the theory that dyspraxia is the result of neurological immaturity in the cortex, and that exercise reinforces neurological pathways in the brain. Her equipment consists of £10 wobble boards from the Avon catalogue and assorted pound-shop balls. She regularly gets letters from other education authorities asking if they can use her exercises. “Parents and schools are welcome to photocopy my work for 5p a sheet. I really don’t give two hoots.”

In the Durham suburb of Stanley, houses are tightly packed. The working men’s club on the corner is boarded up and the shops are closed. The headmaster of Greenland Infant School, Steve Moore, seems to know every one of his children by name. He’s conscious that he can protect those with problems while they’re with him but recognises that, once they start secondary school, the frustration caused by learning difficulties can quickly escalate into serious behavioural problems. According to Home Office figures, around 43% of young offenders have a specific or generalised learning difficulty. Early identification could improve children’s perception of themselves and interrupt this cycle of failure. “Some of our children have chaotic lives,” says Moore. “We’ll do anything in

The Kingdom of Mourne, in the south-east of Northern Ireland, is asdf widely considered a place of magic and real

our power to improve their chances.” Every morning, at 8.40, children can take part in a pre-school exercise class called Wake-up, Shake-up. He points out the ones with obvious motor problems – all on Portwood’s list for intervention.

Andrea Emerson, a special-needs support assistant, gently puts Paddy, aged seven, through some tests. When he walks heel to toe in a straight line, his hands curl up, an “associated movement” suggesting he has some neurological immaturity. When she strokes his fingers, he can’t tell which she is touching. Paddy is a bright little boy, but he also shows signs of hyperactivity, which makes it hard for him to concentrate. The school’s Senco[?????], Julie Davies, will supervise a motor-skills programme, and Andrea will check every few months.

Portwood is certain that nutrition is also a big part of the story. The brain is made up of 60%

fat, 25% of which is the omega-3 DHA. Omega-3 essential fatty acids are crucial to support the structure and function of brain cells. But she is also concerned that dyspraxia is becoming a convenient buzzword for children who just don’t fit the norm. “All labels can damage as much as they help. Children nowadays are not allowed to be eccentric or different or just not academically inclined. There is so much competition that parents find it very difficult to accept that their child is progressing at a different rate to his peers. It worries me that children on quite normal developmental curves are being put under a microscope and found wanting.”

At our six-week Dore check-up, nearly nine months in, Felix lies across two chairs snoozing while we wait to be seen. The mother of a perky seven-year-old is mesmerised. When our Dore practitioner, Jane, asks him how he’s feeling and if he’s seen any improvements, he says: “Ner... not really.” When pressed, he admits he’s finding maths much easier and when he learns stuff for tests he retains it longer. And he’s not looking out of the window any more. “But this is only,” he insists, “because I am trying harder.” “Fantastic,” Jane trills. “We are helping you to try harder.”

As Felix enters his teens, the line between dyspraxia and normal scuzzy behaviour is beginning to blur. Most teenage boys are lazy, eat with their faces 3in from their plates, spill things, forget what you’ve said five minutes after you’ve

you, Felix.” She moves him on to mental tasks. Now, while he balances on the wobble board while throwing a beanbag from hand to hand, he lists Babyshambles tracks and pizza toppings and spells words backwards and forwards. His small brothers and sister are doing Learning Breakthrough exercises just for fun, which makes him sick. I feel cautiously hopeful, but I always do when we’re doing something pro-active.

Felix refuses to be drawn in. He won’t be anybody’s miracle cure. Such is his loathing of them, he won’t even acknowledge the exercises might have made a difference. Understandably, after such a long haul, he wants to claim this success as his own. Any suggestion that the exercises might be working takes away from his very real efforts and achievement. But as he leaves for school in the morning, he remembers to clean his teeth, put in his braces and pick up his homework, which, as far as this mother is concerned, is a minor miracle ■