

BUT ARE SCHOOLS GOING ABOUT THE DISCOVERY AND NURTURING OF IT IN THE MOST EFFECTIVE WAY? JAMES NOTTINGHAM ISN'T CONVINCED...

oes ability come from nature or nurture? If you've thought about this before then you've probably already made up your mind and there's nothing I can say to change it. However, please bear with me because I'd like to show you that what you believe makes a big difference to whether you're more likely to help or to hinder children's learning. I think I can say, without controversy, that both nature and nurture play their role in determining intelligence and talents. But what is the balance between the two? Intelligence and talents are based on so many variables – and here are some examples to muddy the waters still further:

- Wolfgang Mozart's father, Leopold, was also a composer, a leading figure of the court orchestra in Vienna and an accomplished music teacher who presented both the young son and his sister at several musical exhibitions across Europe.
- Sir Bobby Charlton had four uncles who played professional football, and his mother's cousin, Jackie Milburn, is one of the most celebrated footballers ever to have played for Newcastle United. Not a bad gene pool! However, what influence would the following also have had on the development of this

ABOUT THE AUTHOR

James Nottingham is an internationally known freelance trainer and educational consultant, as well as Director of JN Partnership Ltd. Formerly a teacher and leader in both primary and secondary schools in the UK, he is also co-founder of p4c.com, an international resource and collaboration cooperative for Philosophy for Children. Twitter: @JamesNottinghm

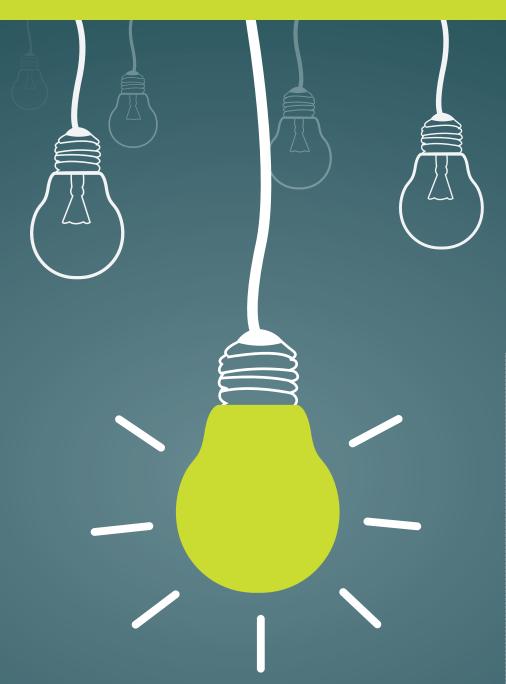
former European footballer of the year?

- (a) The Charlton brothers were the only young lads in Ashington to have a real football to play with.
- (b) Older boys in the town were always willing to let Bobby play with them so long as he brought his real, leather football with him.
- (c) Almost unheard of for a woman in a mining town in the 1940s, Bobby's mother, Cissie, knew the game of football intimately and coached many of the local boys' teams as well as her sons.
- (d) When Bobby watched a game, he'd have one or more of his uncles next to him using the opportunity to offer extra coaching.
- Sir Richard Branson has dyslexia and performed relatively poorly academically.
 However, his parents always encouraged him to strive for his goals and supported his

- risk-taking, even as a pupil at Stowe school when he began his first business, the Student magazine.
- Dame Evelyn Glennie was the first professional solo percussionist in the Western world. This is despite being profoundly deaf since the age of twelve.

Regardless of the limited range of these case studies, my point is that even those possessed of the most 'natural' of talents seem to have benefited considerably from early and sustained advantages that helped nurture their abilities. I'll never be able to run as fast as Paula Radcliffe – but does that mean I should never enter a marathon? Or just because I'm unlikely ever to influence Western thinking in the way Albert Einstein has, should I therefore steer clear of maths or physics? Of course not! And yet it's still common for schools to label children as 'bright' or 'average' or as having special needs, as if intelligence were constant regardless of context or type of challenge. Indeed, Crown Woods College in Greenwich has gone further than that and created three separate spaces for the different 'categories' of ability complete with different uniforms, buildings, teachers, play areas and lunchtimes.

Fans of the 11-plus or grammar school



system may well see nothing wrong with this. Chris Woodhead, ex-chief inspector of schools, would no doubt support the idea, as he claims that a child's 'genes are likely to be better if their parents are teachers, academics, lawyers'. He has also called for more segregation by ability to prevent average pupils dragging down more intelligent classmates. Pernicious though I think this is, I am not suggesting that all children have the same abilities. Of course they don't. But I don't believe genes account for the difference to the degree Woodhead believes. Children from middle class families often perform better at school, but surely this has as much to do with advantages of stability, extra-curricular activities, language used in the home, and so on, as it has to do with genes?

Schools typically have too many children and too few teachers. Having a class of 25–35 children with wildly different interests, competences and attitudes is far from an ideal setting for learning. We need to group children – but what is the best way to do it? Should it be by 'year of manufacture'? This means that, as in the system in England, children born between September one year and August the next will be in the same class at school, regardless of the fact that the former will have had 11 months longer to develop before starting school than his August-born classmate.

So how about grouping by ability? This is very common in many of the countries I work in – Australia, New Zealand, USA, the UK – but quite rare in the Scandinavian countries I visit. Unfortunately, as well as the issues about identifying 'ability' that I discussed earlier, the research around this method is unclear. In a systematic review of fifty-one studies into within-class grouping of children by ability, for example, Yiping Lou and her colleagues found that ability grouping can have a positive effect (albeit so small as to be almost worthless) when compared with no grouping at all, but that it tends to have a negative effect on lower-ability children.

It seems to be the case that, as Robert Marzano's meta-analyses of hundreds of studies examining the options for grouping learners suggests, mixed-ability classes that are then divided into small cooperative learning groups are the best way forward. In his book, *Classroom Instruction that Works*, Marzano states: 'Organizing students in cooperative learning groups has a powerful effect on learning (effect size 0.78),' He explains further that:

- Organising groups based on ability levels should be used sparingly.
- Cooperative groups should be kept to pairs or at the most groups of 3–4.
- Cooperative learning should be applied consistently and systematically, but not oversed.

Children will learn most when they experience a mix of working by themselves, working informally with one or two other children, and working also as part of more formal group of mixed age and ability children to complete a project together. When I worked with Professor Dweck, I heard her say again and again: 'If we label children, we limit them.' So avoid putting children into groups that suggest a 'label' – for example, always seating the highest achievers on a 'top table' or placing those who have been behind up until now in 'the bottom group', as if they have no chance of catching up. Instead, use cooperative groups and keep swapping them around so the focus becomes learning rather than labels.



James is the author of Encouraging Learning (Routledge, £21.99), from which this feature has been adapted, and which is suitable for everyone interested in helping children learn: teachers, leaders, support staff and parents.

"THE WILLINGNESS TO INVEST IN LEARNING, TO GAIN A REPUTATION AS A LEARNER, AND TO SHOW OPENNESS TO EXPERIENCES ARE THE KEY DISPOSITIONAL FACTORS THAT RELATE TO ACHIEVEMENT."

(JOHN HATTIE, 2009)