

Backgrounder: Emotional intelligence

Not for quotation

The first administration of the Programme of International Student Achievement (PISA) by OECD in 2000 confirmed – much to the shock of some nations – that socio-economic status (SES) has a major impact on attainment. In the UK, a group of researchers had for years argued that SES is a dominant determinant of educational outcomes, and exerts huge influence on the life trajectory of individuals. Some key evidence for this came from John Bynner and Tom Schuller's work at the Centre for Longitudinal Studies. This used data from the cohort studies of 1958 and 1970 (the National Child Development Survey and the British Cohort Study), where large groups of people were followed, from birth, through their educational and life experiences. Bynner developed the notion of 'personal capital' to describe those elements of personal psychological disposition which appeared to be highly related to life success. Poor scores on dimensions such as 'externalising behaviour' – feeling powerless in the face of challenges – were strongly associated with poor educational and life outcomes.

The NCDS research strongly suggested that the early formation of personal capital was essential for making good progress in learning, and that family context was crucial in its formation. This led the team to support the objectives of SureStart and the recommendations of the Effective Provision of Pre-school Education (EPPE) project in respect of high quality pre-school learning. In particular, Bynner felt that the integrated health, social and educational support available through family learning centres was likely to be an effective public policy response to the problems of inequalities in the formation of personal capital.

Whilst Bynner's research contributed significantly to the understanding of the precise nature of the personal skills and dispositions which explain the different outcomes being attained in education and life, other researchers examining qualifications statistics continued to be conscious of the very strong linkage between social economic status and qualifications outcomes. Indeed, this is the dominant explanation for high and low attainment (ref 1). In the late 90's, a controversy played out over whether prior attainment explained more of the variation in attainment than social economic status. Those supporting the use of prior attainment as a predictor of later academic success (arguing that at least 50% of variation was predicted by prior attainment) suggested that by adding data relating to social economic background the power of the prediction was only increased by a very small amount (around 7%) (ref 2). However, both the NCDS and EPPE research suggests early formation of personal capital is critical. Since most of the processes measuring prior attainment rely on data captured at the end of the first phase of primary school, this prior attainment data is already heavily determined by social economic status. In other words, when measuring the different attainment using prior attainment as an explanation for that difference, one is at the same time measuring the effects of social background.

This dominance of social economic status in attainment data continues to be deeply troubling. The problem is not peculiar to England – PISA showed it to be a deep problem in some other leading European nations. Researchers at Cambridge Assessment sought to probe more deeply into qualifications data to try to understand patterns of unequal attainment which might be explained by personal capital. Taking data on nearly 2000 pupils who took science GCSE from the OCR awarding body, the researchers

investigated a series of dimensions similar to those examined by Bynner and colleagues: impulsiveness, optimism, emotion regulation, etc. What emerged was interesting. The research showed that some of the measured elements of personal capital predict attainment in GCSE science over and above the contribution made by prior attainment (using KS3 test scores). In particular – and consistent with the Bynner research – self-motivation and low impulsivity were significant positive predictors of attainment in all the science subjects examined. The effect did vary across science subjects – it had the greatest effect in Applied Science Double Award and least effect in Physics.

Personal capital – deriving from early formative experiences in the family and life, and cumulatively affecting educational progression, is strongly in play in attainment in key phases of educational life. Does this mean that we should pay far more attention to personal capital in learning provision at all ages? Kathy Sylva's and Brenda Taggart's valuable perspectives on this come from their work on pre-school provision: educationalists who attend to emotional development of children in preference to ensuring solid cognitive development – in mathematical understanding, in reading, in writing – are selling children short. Naturally, a child with massively disruptive tendencies and poor learning behaviours will not progress well, and these things need to be attended to. But educational provision which fails to set adequate cognitive challenge and fails to help children acquire key bodies of knowledge and deep understanding in subjects, does not promote adequate learning gain in their pupils. Conversely, provision which emphasizes academic and cognitive progression and at the same time ensures that personal capital is attended to, is that which best serves the widest range of learning needs. Personal capital counts; it explains much. But like so many things, it is necessary but insufficient.

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References

Ref 1:

Raffe D, Croxford L, Iannelli C, Shapira M, Howieson C 2006 *Social-Class Inequalities in Education in England and Scotland Special CES Briefing No. 40* May Centre for Educational Sociology, University of Edinburgh

ONS 2005 *Population Trends* Office for National Statistics

Demack S, Drew D and Grimsley M 1998 *Myths about underachievement: gender, ethnic and social class differences in GCSE results 1988-93* Paper presented at the British Educational Research Association Annual Conference, Queen's University of Belfast, Northern Ireland, August 27th to August 30th 1998

Jackson, M, Erikson, R Goldthorpe, J and Yaish, M 2007 *Primary and secondary effects in class differentials in educational attainment: the transition to A-level courses in England and Wales* Sage

Bell J 2003 *Beyond the School Gates: the influence of school neighbourhood on the relative progress of pupils* Oxford Review of Education vol29 #4 pp485-502

Ref 2:

Fitz-Gibbon C 1995 *The Value-added National Project General Report: Issues to be considered in the design of a national value added system* Centre for Evaluation and Monitoring Durham University

Office for National Statistics <http://www.statistics.gov.uk/ci/nugget.asp?id=1003>
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