

Education Committee
DfE use of Evidence

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On behalf of the Save Childhood Movement
Early Years Education (EYE) Academic Advisory Group
www.savechildhood.net

Summer-born children: the case for equal opportunities and inclusion

There is a considerable body of evidence, stretching back to at least the 1960's (Armstrong, 1966; Bell & Daniels, 1990) showing that summer-born children significantly under-achieve academically in relation to autumn born children. They are, for example, significantly over-represented amongst the children diagnosed with specific learning difficulties (Martin et al, 2004) and attending special schools (Bibby et al, 1996). The precise causes of this have been difficult to determine, but it is likely that the relative immaturity of summer born children in age-cohort classes is a significant factor. In one particular study, Daniels, Shorrocks-Taylor and Redfern (2000) showed that summer born children's results in standard tests still showed a systematic difference to the results of children born at an earlier stage in the school year, even when they had spent the same amount of time at school as their older classmates. It therefore appears that this difference arises because they remain the youngest in their class and that simply taking children into the school system at an earlier age does not adequately tackle the issue, and that as long as summer-born children remain in age-cohort classes, where they are always the youngest and least cognitively and physically mature, they will not be able to benefit from the educational experiences provided as well as their older peers.

There is robust evidence from around the world that, on average, the youngest children in their year group at school perform at a lower level than their older classmates (the 'birthdate effect'). This is a general effect found across large groups of pupils. Specific Summer-born pupils may be progressing well, but the strength of the effect for the group as a whole is an issue of very significant concern

Sykes et al (2009, p.3)

There are only two nations in the world where this effect is not experienced- Finland and Denmark (Bedard and Dhuey 2006). In both nations, children are not expected to engage in a formal academic curriculum until much later in their schooling than in other European nations, by which time the developmental experience percentage 'gap' has begun to significantly narrow. For example, by the eighth birthday summer born children have 12.5% less developmental experience than winter born children, compared to a 20% differential between a four year old and a five year old. By the mid-teens, children from both of these nations significantly outperform British children in many areas of the curriculum, literacy in particular (PISA 2009).

The 'summer born' effect is more apparent in the early years, but it is found across the whole period of education in England, and at levels that indicate the youngest children experience the greatest problems.

Summer-born children keep on lagging behind

% attainment gap between autumn-born and summer-born children



theconversation.com

Data: UK Department for Education. *Maths

(Theconversation.com 2014)

In England, we find that being younger in your school year has significant negative effects on outcomes including national achievement tests at age 16 and higher education (college) participation at age 19/20. This negative effect is not only for the very youngest – it is incremental across the whole age distribution within a cohort.

(Institute for Fiscal Studies 2010, p.2)

Crawford et al (2011) suggest that there is additional evidence to suggest that summer born children are more likely to report being bullied or that they are 'unhappy' in the early stages of schooling than winter born children, more likely to opt for vocational training than academic study at the 16-18 stage of education, and less likely to attend a Russell Group University. They also find evidence that middle class summer borns are given a richer learning environment in the home than winter borns: 'parents appear to be 'compensating' for the disadvantages that their August-born children face in school by spending more time at home helping them learn' Crawford et al (2011, p.3), but that this has little impact upon the summer-born/ winter born gap when socio-economic advantage data is factored in. This again suggests that extra input is not effective in closing the summer born/ winter born gap. Why might this be?

Evidence from developmental psychological research suggests that children's abilities to learn through direct instructional approaches, typical of formal schooling, are not clearly secured until around the age of 7 years. During this period, the rapid development of children's executive functioning (working memory, inhibitory control and control of their attention) (Garon, Bryson & Smith, 2008) and 'Theory of Mind' (Klein, 1998) support their crucially significant transition from being dependent on the guidance of adults, or 'other-regulated', to achieving independent cognitive control, or 'self-regulation'. In a number of recent publications, Whitebread (2012, 2013, 2014) has provided comprehensive reviews of research indicating the fundamental significance of early self-regulation for long-term educational achievement and emotional well-being, and the role of informal adult-child interactions and playful learning experiences in supporting its early development. This evidence clearly supports the view that children are best supported to become confident and powerful learners by the provision of informal, play-based educational experiences up to the age of 7. At that point, they are then equipped, irrespective of the month of their birth, to be able to benefit from formal schooling.

In England, Sykes et al report that a disproportionate number of summer born children are referred for special educational needs, many of whom had been initially misdiagnosed. It appears that some early years teachers and practitioners create over-homogeneous expectations of children allocated to birth year 'class' cohorts, regardless of the fact that the oldest child in the group has benefitted from 20% more developmental experience than the youngest: 'teachers may not take children's relative levels of maturity into account when making assessments of their ability and may therefore label younger children as less able than their older peers' (Sykes et al 2009, p.4). Crawford et al (2011) additionally found that summer born children were more likely to smoke tobacco and cannabis, and to be regular drinkers of alcohol in the mid-teenage years. The reasons for this are unclear; for example it may relate to accumulated stress caused by being constantly pitted against older children in a highly competitive education system, which simplistically ranks pupils on the basis of formal test results, or it may be due to the relative immaturity of summer borns when they initially meet such temptations, as compared to their winter born peers.

The evidence therefore suggests that in England, we urgently need to change our school entry procedures. It is crucial that children are not discriminated against at the very beginning of their schooling on the basis of the time of the year at which they were born; and the research suggests that such a policy is just as damaging as discriminating against a child on the basis of disability, ethnicity or gender, all of which are the focus of quite exacting legislation in The Equality Act 2010 (Gov.UK 2013). Even the most basic equal opportunities approach would entail all children having the same entitlement to education and care that is appropriate to their current stage of development, regardless of birth-date: 'If the aspiration of 'fairness for all children' in education is to be realised, the contribution of the developmental courses of cognitive and emotional abilities to birth date effects needs closer investigation' (Sykes et al 2009, p.34).

Based on a review of the international literature relating to early years education reform, the Scottish Executive Education Department (2006) suggested that the evidence suggests that a better way to proceed with respect to a school entry age would be to create two distinct stages of early years practice from birth to three and from three to six, with children's setting placement in the later stage being extremely flexible, based on a number of factors, most importantly, the child's individual level of development. Flexible admission to school based on calendar age rather than allocation to a birth year cohort was also advocated by Sprietsma (2007), in a study carried out for the Center for European Economic Research. Perhaps some thought should be given to extending the 'early years' stage of education, and flexible admission, transitions and grouping of children to the point at which the child attains his/ her seventh birthday, by which time the percentage of life experience that a summer born child lacks in comparison to an autumn born child has greatly reduced, besides which the ability of the child to deal with the abstract language and concepts required to fully engage in the culture of formal education has greatly increased due to increasing developmental maturity (Whitebread 2012, 2013, 2014).

In England, concerned parents have created the Campaign for Flexible School Admissions for Summer Born Children (<http://summerbornchildren.org/home-2/>), claiming that their children's rights as stipulated by the European Union Charter of Fundamental Rights have been contravened, in terms of their child's best interests not being a consideration in England's processes for admission to the education system. In July 2013, the DFE published

a document in response to such criticisms, setting out their policy. Initially, they inform readers that parents are not compelled to send their child to school until s/he has passed his/her fifth birthday, but they go on to state that 'Children are assessed when they reach the end of each key stage, not when they reach a particular age' (DFE 2013, p.7). This clearly puts parents into an insoluble quandary. On the basis of this policy muddle, if a child turns five in August s/he does not legally have to attend school until the entry to Year 1- however, s/he will still be assessed on the same basis as children who were born in the September of the previous year, and who have been in school for a whole year longer. This is clearly highly discriminatory, and in the face of such a muddled approach to school entry, it is very understandable that parents are left with no choice other than to express their dissatisfaction in a formal campaign against this policy.

The evidence would therefore seem to suggest that a fairly radical change to school admission policies is required if the UK schooling system is to respond in an equitable fashion to the needs of children born in different months of the year. The evidence from international comparisons, and from what is now known about early child development, would suggest that the simplest and most sustainable approach would be to extend the period of informal, play-based pre-school provision, along the lines of the existing Early Years Foundation Stage, until children are 7 years of age. This would ensure that all children would then be cognitively and emotionally ready to begin their formal schooling, including formal instruction in reading and mathematics. Countries in which this is the current approach have been shown to achieve higher educational outcomes overall, and to have eradicated inequitable consequences for their 'summer-born' children.

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Contributor bios

Dr David Whitebread, Faculty of Education, Cambridge

David Whitebread is a developmental cognitive psychologist and early years specialist. Before joining the Faculty he taught in Primary schools, mainly in Leicestershire, for 12 years. His research interests are concerned with children's cognitive development and implications for early years and primary education. A particular focus has been the development of metacognitive awareness and strategic control in relation to a number of areas of learning. These have included children's problem solving and reasoning, mathematical strategies and road safety skills. Other interests include children learning through play, evolutionary psychology and the application of cognitive neuroscience to education. His current research focus is concerned with the early development of metacognition and self-regulation in young children, and with the role of play and language in supporting this development.

Current Research Projects

ChAT (Children Articulating Thinking): an internally funded project which aims to examine the role of classroom talk in the development of Year 1 children's metacognition and self-regulation.

PLaNS (Play, Learning and Narrative Skills): a project funded by the LEGO Foundation investigating the impact of an intervention using playful experiences with Lego to support the development of children's metacognitive abilities, and their narrative and writing skills.

Selected Publications

Whitebread, D. (2014). The importance of self-regulation for learning from birth. In H. Moylett (Ed.). *Characteristics of Effective Learning: helping young children become learners for life* (pp. 15-35). Maidenhead: Open University Press.

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Dr Pam Jarvis, Leeds Trinity University

Dr Pam Jarvis is both a historian and a graduate psychologist, and her key research focus is that of 'well being' in education across all age ranges and academic levels. She has many years of experience of creating and teaching developmental, social science and social policy modules for Education/ Child Development programmes in higher education. She has Qualified Teacher Status (secondary) and was awarded a PhD by Leeds Metropolitan University in 2005 for her thesis 'The Role of Rough and Tumble Play in Children's Social and Gender Role Development in The Early Years of Primary School'.

Before joining Leeds Trinity, she led the postgraduate programme in Early Childhood Studies and the Early Years Professional Status Project at Margaret McMillan School of Teaching, Health and Care in the Bradford College University Centre. She has been an Open University Associate Lecturer since 1997, and is currently working on the Masters in Education/ Masters in Childhood and Youth module 'Understanding Children's Development and Learning'.

Pam is originally from South London, but has lived in Yorkshire for over 25 years. She has three adult children who provided her initial education relating to the importance of play-based learning within human development, and she continues to learn from observing the play of her two young grandsons.

Teaching and Administration

Pam is currently working in the Department of Children, Families and Young People, delivering modules on the Foundation Degree and the BA (Hons). From September 2014, she will be contributing to the Leeds Trinity University Early Years Teacher Status pathways.

Research

Pam has been engaged in active research for over twenty years, and is currently concluding a piece of historical research on the life and work of Early Years practice pioneer Margaret McMillan. She is preparing to extend her PhD research, focusing specifically on the original narratives that young children create within their free play. Her theoretical approach is that of human development through biocultural or 'nature via nurture' processes, viewing the evolutionary, biological and social aspects of development as intricately intertwined; this is outlined in her book 'Perspectives on Play'; see below. In the past, she acted as lead researcher on a project that evaluated a reading recovery programme for secondary school pupils within the inner city areas of Leeds, Bradford and Halifax, and a project that

investigated the experiences of 'parent learners,' balancing higher education study with the provision of care for dependent children and paid employment.

Selected publications

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