

When you are born matters for academic outcomes: urgent policy action needed to help summer-born children

Children born later in the school year perform significantly worse in exams than those born earlier in the school year, even up to GCSE level, according to new research published today by IFS. Policy changes are needed if this unfair disadvantage is not to damage the chances of summer-born children.

Key results:

New work by researchers at IFS draws on administrative data covering the entire state school population in England and shows dramatic differences between the proportions of August- and September-born children reaching the expected level, from Key Stage 1 through to Key Stage 5.

Table 1 Comparison between the percentages of August- and September-born children reaching the expected level

	Group 1 (born 1997–98 or 1998–99) ¹				Group 2 (born 1990–91 or 1991–92)				Group 3 (born 1985–86, 1986–87 or 1987–88)			
	Girls		Boys		Girls		Boys		Girls		Boys	
	Sep	Aug	Sep	Aug	Sep	Aug	Sep	Aug	Sep	Aug	Sep	Aug
Key Stage 1 (age 7)	80.1	53.0	70.5	47.1	70.3	44.6	61.2	34.9				
Key Stage 2 (age 11)					76.0	62.7	71.9	59.1	65.4	50.0	60.9	45.9
Key Stage 3 (age 14)					72.9	65.2	68.8	60.3	65.9	57.1	61.6	51.9
Key Stage 4 (GCSEs)									60.7	55.2	50.3	44.2
Key Stage 5 (A-levels)									42.5	40.5	33.2	31.5

Table 1 shows that, while the attainment gap between August- and September-born children decreases over time, worryingly it still persists at age 16, when pupils are sitting their GCSEs (Key Stage 4). While 60.7 per cent of September-born girls (50.3 per cent of September-born boys) achieve at least 5 A*-C grades at GCSE – the expected level – only 55.2 per cent of August-born girls (44.2 per cent of August-born boys) do the same. This means that access to further and higher education, and hence future success in the labour market, is likely to be significantly affected by the month in which you are born.

¹ This is a 1 in 10 sample of the children born in these years. We also have Foundation Stage results for this group.

To put these differences into perspective: at age 11, the attainment gap between August- and September-born students (of around 14 percentage points²) is only slightly less than the average improvement in Key Stage 2 results since Labour came to power in 1997 (around 17 percentage points).

Looking deeper:

The report considers four factors that might be driving these differences: the age at which children sit the test, the age at which they start school, the amount of schooling they receive prior to the tests, and whether they are amongst the oldest or the youngest in their class.

We find that, overwhelmingly, it is the age at which a child sits the tests that matters.

In the past, considerable attention has been paid to whether school admissions policies (which potentially affect the age of starting school and length of schooling for spring- and summer-born children) drive age-related differences in test scores. We find that they actually have very little impact on academic outcomes (at least in the long run). To the extent that a few months' difference in age of starting school (or length of schooling) does matter, our results suggest that it is preferable for August-born children to start school *earlier* rather than later.

Worryingly, we also find evidence that teachers and/or parents seem to be mistaking poorer performance as a result of age for special educational needs: at age 11, August-born girls are 72 per cent more likely than September-born girls to be recorded as having non-statemented (less severe) special educational needs, and 25 per cent more likely to be recorded as having statemented (more severe) special educational needs. For boys, these figures are 46 per cent and 14 per cent respectively.

Claire Crawford, one of the authors of the report, said “This report highlights the penalty that August-born children face, simply because they are unlucky enough to have been born late in the school year. This cannot be acceptable on either equity or efficiency grounds, and urgent steps must be taken to eliminate this inequity.”

Policy options:

Possible policy options that might reduce or eliminate this gap include:

Age adjusting test results and/or testing when ready. One simple solution would be to age normalise test results (i.e. adjust scores in such a way that the proportion of children achieving the expected level does not vary by month of birth) and/or to specify an age (rather than a school year) at which children are expected to reach a certain level – e.g. Level 2B by age 7½, Level 3 by age 9½, and so on³ – and test

² This gives equal weight to the results for boys and girls, and Groups 2 and 3.

³ This is an example rather than a policy recommendation.

children *when they are ready* (rather than at a prescribed time). This may result in large changes in school league table positions, particularly for primary schools.

Whichever option is implemented, the issue of progression in education beyond age 16 requires special attention. Lorraine Dearden, one of the authors of the report, said “We think it is crucial that account is taken of date of birth in determining *progression in education* beyond age 16. At the point at which a child leaves school, then, of course, actual qualifications must be used (to reflect true levels of human capital); but when assessing whether pupils can continue in education, age-adjusted results must be used to avoid penalising summer-born children unfairly.”

Allowing for more flexibility with entry and progression, and/or changes to free nursery provision.

Another alternative would be to introduce more flexibility into the age at which children start and/or progress through school. If this option were to be adopted, then careful consideration would need to be given to the issue of who decides whether a child is held back a year. Furthermore, if the option of delaying entry into school were to be implemented, then school-hours nursery provision must be made available as an alternative, to ensure that the decision is made on the basis of a child’s educational needs rather than parental childcare needs.

Additionally, free nursery provision is currently only available from the beginning of the term after a child turns 3, which means that summer-born children generally receive less nursery provision than autumn- and spring-born children. Perhaps the August birth penalty could be reduced by offering free nursery provision from the beginning of the *academic year* in which a child turns 3, to ensure that all children – regardless of birthdate – have the opportunity of accessing the same amount of free nursery education.

Other options. These include local education authorities (LEAs) adopting school admissions policies in which all children start school in September, and improving teacher (and parent) awareness of date-of-birth penalties.

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Notes to editors:

1. The report *When You Are Born Matters: The Impact of Date of Birth on Child Cognitive Outcomes in England*, by Claire Crawford, Lorraine Dearden and Costas Meghir, will be presented in detail on Wednesday 24th October, from 11am to 12.30pm at the Institute for Fiscal Studies. Please contact Bonnie Brimstone (bonnie_b@ifs.org.uk) if you would like to attend. The report will be available to download from the IFS website immediately after this briefing.
2. The authors gratefully acknowledge funding from the Esmée Fairbairn Foundation (grant number ED/04-2226) and the Department for Children, Schools and Families via the Centre for the Economics of Education.