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News

The cost of failing our maths students



How do you persuade a nation that basic maths skills are just as important as being able to read and write? You put a price tag on them. This is what the accounting firm KPMG has done in its report *The long term costs of numeracy difficulties*, which was published last week. The firm estimated that the soaring number of people who leave school without adequate numeracy skills could cost the UK taxpayer up to £2.4 billion every year. The report backs the launch of a £6 million campaign by the *Every Child a Chance Trust*, which encourages businesses to spend money on helping school children overcome their numeracy problems.



Too many children leave primary school with poor numeracy skills.

According to the report, around 33,000 children (6% of 11-year-olds) leave primary schools each year with poor numeracy skills, which in turn leads to an estimated 7 million innumerate adults with mathematical skills at or below those of a nine-year-old. The resulting long-term cost to the public purse could be as high as £44,000 per individual up to the age of 37.

Behind the stark figures lie the personal hardships facing those affected by poor education. It is well-known that unemployment, poor mental health, drug addiction and criminality often go hand in hand with poor literacy skills, but the report points to evidence that poor numeracy skills have just as important a role to play

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in the lives of those trapped at the bottom of the social scale. Thus, poor maths skills do not just impact on public spending through the costs associated to education for example special needs support or truancy prevention but also through the costs associated to unemployment, health and crime. It is these costs the report attempts to estimate. For example, it puts the price of innumeracy through unemployment at £1.9 billion, through crime at £165 million, and through drug use and teenage pregnancy at £98.9 million.

The *Every Child a Chance* campaign will encourage local businesses to contribute up to £12,000 a year over three years to an extension of its early intervention programme, *Every Child Counts*. The government-backed programme provides children aged seven who have the greatest difficulties with numbers with extra tuition for a limited period, and also plans special maths tool kits for children to take home, containing CDs and mathematical games. Local businesses will be encouraged to supply volunteers to become "number partners" to help children with their sums.

According to KPMG, whose chairman John Griffith-Jones is also Chairman of the *Every Child a Chance Trust*, such early intervention can lift around eight out of ten of the children who receive it out of "numeracy failure". Sticking to the language of cost-effectiveness, the report's authors estimate that every £1 spent on the *Every Child Counts* programme will save between £12 and £19 later on. Barclays has already signed on to be the first national sponsor, pledging £1.2million to provide a co-ordinating structure for the programme and to establish sponsorship relationships between 20 Barclays branches in England and their local primary schools.

Ironically, the KPMG report was published in the same week as a [US jobs website](#), which deems the job of mathematician to be the "best" occupation out of a list of 200, with other maths-based jobs like statistician, actuary, accountant, computer scientist and economist also making the top twelve. The website CareerCast.com decided that mathematics comes top in terms of five criteria: work environment, income, employment outlook, physical demands and stress.

Results like these highlight the image problem of mathematics: the gap between what people *think* maths is and what it could actually do for them. It is this image problem that the numerous maths initiatives that have been set up over recent years have to tackle, so that eventually innumeracy will become just as unacceptable as illiteracy.

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