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News

Maths adds up



Slogging through your A–Levels at the moment? Wondering what it's all for? Here's some consolation from researchers at the London School of Economics – it seems that an A–Level in maths can significantly boost your earnings.

In new research by Anna Vignoles and Peter Dolton, it is suggested that "individuals who have mathematics A Level earn between 7% and 11% more than otherwise similar individuals who do not take mathematics beyond the age of 16."

The benefits extend to those who have gone on to take tertiary degrees, even in subjects other than maths: "an economics graduate who has mathematics A Level will earn up to 11% more than a similar economics graduate who has not".

Why might this be? Table 1 shows the relative number of subject entries at A Level across all candidates in schools and Further Education colleges in 1997.

Table 1: A Level Subject Entries

| | | |
|-----------------|---------|-----|
| Sciences | 150,547 | 21% |
| Mathematics | 63,858 | 9% |
| Social Sciences | 216,415 | 30% |
| Arts | 121,250 | 17% |
| English | 89,043 | 13% |
| General Studies | 72,456 | 10% |

Source: DfEE 1997

At only nine percent of total enrolments, a maths A Level is not taken by many students. Therefore it may well be a case of supply–and–demand: strong maths skills are comparatively rare, and "standard economic theory suggests that if there is a shortage of a particular skill, then individuals who possess this skill will earn more than those who do not".

Is this wage benefit likely to last? Theoretically, no: "over the longer run, we may expect the numbers taking maths to increase and the wage premium associated with mathematics to fall". However, in practice the

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benefits of a maths A Level don't seem likely to disappear in a hurry: "our research suggested that the wage premium may be more permanent, since we found evidence of it in both the 1980s and 1990s."

LSE

The London School of Economics.

DfEE

The Department for Education and Employment.

DfEE

The Department for Education and Employment.

BBC NEWS ONLINE

A makeover for maths where PASS Maths features as a mathematics education resource!

BBC NEWS ONLINE

Maths students count themselves better off!

Source:

Anna Vignoles: *A levels: does less mean more?*

CentrePiece Magazine (LSE), Spring 1999, pp. 8–11.

K.E.M.



Plus is part of the family of activities in the Millennium Mathematics Project, which also includes the NRICH and MOTIVATE sites.