



# Do CAO bonus points for taking Leaving Cert maths add up?

Critics say the new system rewarding success in one subject will be crude and inequitable



THE BIG ISSUE  
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It is a sledgehammer measure aimed at making the Irish population better at sums. The implications of the universities' decision to offer hefty bonus points to students who manage a pass in higher-level maths are beginning to sink in.

From 2012, Leaving Certificate students who get a D or better will be rewarded with 25 CAO bonus points for university entry.

Opinion in education circles is sharply divided on the measure. Its supporters, including Education Minister Mary Coughlan and employers in hi-tech industries, believe that an incentive is needed to encourage students to continue with higher-level maths to the Leaving Cert.

On the other hand, opponents of the bonus believe it is crude and inequitable, and that it will create great anomalies in admissions to higher education.

The current crop of fifth-year students will be the first to experience the new arrangements, which are being introduced on a four-year trial basis.

The bonus will be a standard 25, giving students a total of 70 points for a higher level D3 up to a maximum of 125 for an A1.

The Teachers Union of Ireland has not made a firm decision to oppose the measure, but it has strong reservations about it.

Bernie Judge, the TUI's Education Officer says: "As it is currently being put forward, the system is likely to be much too crude. It is certainly not fair and just."

"There may be a case for giving bonus points for college applicants if they are studying maths or science at third level. But why should you get bonus points for maths, if for example, you want to study history?"

"In that case, you might have someone who might make a very good historian being displaced, because they don't have higher-level maths."

"Maths should not be promoted at the expense of other subjects."

The possible anomalies in the measure were highlighted in one of the Department of Education's own reports earlier this year.

One of the purposes of the points boost is to encourage participation in STEM subjects (Science Technology Engineering and Maths) at universities. But will it have that effect?

Weighing up the pros and cons of bonus points, a report by the government's Project Maths Implementation Support Group warned: "Bonus points could have unintended consequences. Higher bonus points could enable more students to take up non STEM courses."

In other words, students may take the points from maths, but study a subject without any maths content.

Although the universities have come down in favour of bonus points, there are dissenting voices among academics.

Kathleen Lynch, Professor of Equality Studies at UCD, has been a vocal critic of the measure. One of the justifications for bonus points is that learning maths develops logical reasoning skills in other fields, but Professor Lynch believes this is

a 19th-century myth.

She has suggested that it is scientifically incorrect to suggest that cognitive skills in one subject transfer automatically to another discipline.

The maths brainbox does not necessarily make a great English scholar or design student. UCD economist Dr Kevin Denny questions the incentives offered under the universities' bonus points scheme and warns that they could have perverse effects.

Under the scheme, candidates will get 25 extra points whether they get an A or a D.

"I would have thought there was an argument for increasing the bonus as one gets a higher grade," said Dr Denny, on the UCD Geary Institute's blog.

'Say a student wants to get a certain amount of points from maths. In the past he could have got it from, for example, a C. Now a D will do. Might he be tempted to put in less effort, settle for a D instead, and re-allocate effort to other subjects?'"

There is also a strong argument from Professor Kathleen Lynch and others that the bonus boost to maths pupils will perpetuate inequality in education.

It is shocking to note that 79 Irish second-level schools did not have a single candidate sitting higher-level maths at the Leaving Cert last year.

The report of the Project Maths support group noted that many of these schools had students studying at higher level but they all opted to take the ordinary level paper.

Thirty-five schools had no higher-level students at the beginning of the year.

"There are still schools where there are perhaps a few students who would like to take higher-level maths, but the school does not teach it," said

Bernie Judge of the TUI.

Now that students of higher-level maths are being massively rewarded, the Department of Education will have to ensure that all schools at least offer the subject.

There are also doubts about whether Irish teachers are well qualified enough to bring an increased number of higher level maths students up to speed.

There is common agreement on both sides of the argument about bonus points that improving the quality of teaching of the subject may be just as important as getting students to study to a higher level.

Around half of second-level maths teachers do not actually have a mathematics teaching qualification, according to recent research at the University of Limerick.

One experienced maths teacher said: "I would support bonus points for maths, but it will be only a part of the solution to our problems with the subject."

"Hopefully the new curriculum will help to engage students. We also need to devote more time to the subject in schools and improve the quality of teaching as well."



Making the grade: Deirdre Donohue, Miriam McLaughlin, Michelle Downes, Aisling O'Sullivan and Deirdre Twomey celebrate graduating from NUI Galway. Picture by Ray Ryan