

Media Statement: Tuesday, 21st November 2023

Females Being Disadvantaged by Leaving Certificate Higher Level Mathematics

Gender imbalance likely in STEM (Science, Technology, Engineering and Mathematics) careers and in female access to high-points third level courses generally

The sharp decline in female performance at the highest level in Leaving Certificate Higher Level Mathematics since 2012 is likely to create a gender imbalance in STEM (Science, Technology, Engineering and Mathematics) careers and in female access to high-points third level courses generally, according to a report published today by the Society of Actuaries in Ireland (SAI).

This decline coincides with the introduction of two material changes to Leaving Certificate Higher Level Mathematics. 2012 was the first year that the new "Project Maths" syllabus was examined; and it was also the year that an additional 25 flat bonus points were introduced for all students who achieve a H6 (40% to 49%) or above in Higher Level Maths.

The Society of Actuaries' report shows that males subsequently outperformed females at the highest grade in Higher Level Mathematics for the remainder of the decade since 2012. Even though the numbers of males and females sitting the exam were broadly equal over this period, only 25% to 30% of the H1s were achieved by females. The gap broadly disappeared in 2020 when 'Calculated Grades' were introduced as a Covid-19 emergency measure. The return to an examination-based system has resulted in a gender gap re-emerging.

The report also points out that, in another very concerning development, there was a sharp deterioration in female performance at the highest grade in the 2022 Junior Cycle Mathematics examination. The Junior Cert. Maths exam was replaced by the new Junior Cycle exam in 2022. Although the mathematical content of Junior Cycle Maths was broadly unchanged, it did involve a different approach to teaching, learning and assessment. 2022 also marked the introduction of a new grading system at Junior Cycle level.

The analysis from the Society of Actuaries stems from a concern about the sharp decline in the proportion of female new entrants to the actuarial profession. When examining why this decline had occurred, the SAI Working Group found that it broadly mirrors the gender gap at the highest performance level in Leaving Certificate Higher Level Mathematics that has been particularly evident since 2012. The Society of Actuaries has provided its findings to the Minister for Education and is hosting a public webinar on 29th November to discuss the report and its recommendations with key stakeholders and interest groups, including the Department of Education.

The report is available on:

https://web.actuaries.ie/events/2023/10/webinar-understanding-gender-gap-highestperformance-level-leaving-certificate

Ends

Media enquiries to Jennifer Loftus, Chair of the SAI Working Group: (086) 387 0155 / jennifer.loftus@acornlife.ie

Society of Actuaries in Ireland

The Society of Actuaries in Ireland is the professional body for actuaries practising in Ireland. Actuaries provide advice on and relevant solutions for financial, business and societal issues involving uncertain future events. Most of the Society's members work in the financial services industry, and members of the profession hold statutory or regulated roles relating to the financial management of pension schemes and insurance companies. The Society seeks to make an impartial contribution to public debate on social policy and public interest matters where an actuarial perspective can add value.

Issued on behalf of the Society of Actuaries in Ireland by Setanta Communications:

Michael Moloney, (087) 258 7264, mail@setanta.ie