29 April 2020

Dear Minister,

Re: Centre assessment grades for girls studying physics

I am writing about the use of calculated grades in lieu of exams, and the recent guidance around this method. We are pleased that, in your guidance, you state that you will “put in place a robust process that would provide the young people affected with fair and equitable results”, and we welcome CCEA’s commitment to ensure the fair allocation of grades in lieu of this summer’s exams.

However, we are concerned that centre assessment grades are likely to under-reward girls and students from lower socio-economic groups. Evidence suggests that unconscious biases can result in predictions of physics grades being lower for girls, even when the same piece of work is being graded. This can also be true for less privileged students.

Our understanding is that schools will submit a rank order in each subject for students in their school. We therefore suggest that, for physics, these ranked lists are checked to ensure that there is a representative distribution of boys and girls. It may be worth including this check in the guidance to schools and asking them to do the same for any subject that might be exposed to unconscious gender biases. A further measure should be to ensure that the proportion of girls and boys achieving each grade nationally matches the distributions from previous years. We suggest that this second, national comparison is also used as a check on the final distribution of awarded grades by socio-economic status.

We are keen to ensure that those who study physics have the best chance to progress in their chosen careers or studies, and to support the Department of Education, and CCEA, to meet the unprecedented challenges posed by Covid-19. We would therefore be happy to carry out some research on the above trends in the study of physics, if CCEA would be able to provide some data around grades awarded, gender, and socio-economic status (e.g. numbers eligible for free school meals).

If the IOP can offer any further information or advice, we would be very pleased to do so.

Yours sincerely

[Signature]

Professor Paul Hardaker CMet FRMetS FInstP
Chief Executive Officer