

The Institute of Physics' manifesto for change

Through the Limit Less campaign, the IOP wants to support young people to change the world and fulfil their potential by doing physics.

However, for some young people this is less likely than for others. The campaign has identified five particular groups that are currently underrepresented or underserved in the physics community – these young people are less likely to do physics and more likely to face a hostile environment when they do.

These groups are:

- · Girls
- Young people from disadvantaged backgrounds
- · Disabled young people
- LGBT+ young people
- Young people of Black Caribbean descent

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Another teacher at a local college promoting physics told me that I 'should think twice' as I 'may find the maths a little hard' - I later heard him telling a male prospective student that 'Oh, don't worry about the maths, it's not that difficult!'.

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Our teacher would call the girls the remedial group and 'team fake tan' which made us feel more isolated from the rest of the class.

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To combat this, the IOP is calling on the governments of the UK and Ireland to:

- 1. Revise professional standards for teachers to set out an expectation that teachers will address injustice in their professional practice and actively dismantle any sexism, racism, homophobia, ableism and classism from their own work and their schools.
- 2. Ensure that all teachers are trained to teach inclusively and to tackle injustice so that they can achieve these robust standards. This should be in both their initial teacher education and their continuing professional learning and development.
- Direct those responsible for school inspections to place greater emphasis on the importance of inclusive teaching and schools' efforts to address injustice.
- 4. Mandate nurseries and schools to develop whole-school equity action plans that:
- are informed by ongoing data and evidence collection including students' choices.
- promote equity and equality for young people in underserved groups.

In all nurseries and schools, the IOP wants to see:

5. All staff challenge bias and stereotyping.

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Being a visually impaired student, I cannot begin to explain the number of challenges I have faced from school, exams and even subject teachers from primary school to secondary and even sixth form... 44

In GCSEs studying physics, as I am a lesbian I was called slurs and was led to believe that I wouldn't fit in in physics because I'm LGBT.

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- 6. Educators, parents and students develop and implement whole-school equity action plans that provide an inclusive environment and promote equity and equality for young people in underserved groups.
- 7. Those responsible for school governance play an active role in ensuring that equity and equality are promoted in their schools and that inequalities are addressed, including appointing a member with specific responsibility for equality.
- Teachers teach physics and science in an inclusive way that promotes a positive, contemporary view of physics and portrays physicists from a wide range of backgrounds including the underrepresented and underserved groups.
- 9. All young people and their parents and carers receive a high standard of careers advice that includes physics-related career options and promotes studying physics beyond age 16.
- 10. More young people from underserved groups benefit from learning outside the classroom, such as in science or STEM clubs.

To support this manifesto, visit here: campaign.iop.org/manifesto

To learn more about our campaign visit here: iop.org/LimitLess

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