

The Corporate Development Officer
The Education Authority
17 Lough Road
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1 June 2017

To whom it may concern,

Strategic Plan 2017-2027

The Institute of Physics (IOP) welcomes the chance to respond to the consultation on the Education Authority Strategic Plan 2017-2027.

The Institute of Physics is a leading scientific membership society working to advance physics for the benefit of all. We have a worldwide membership, from enthusiastic amateurs to those at the top of their fields in academia, business, education and government. Our purpose is to gather, inspire, guide, represent and celebrate all who share a passion for physics. And, in our role as a charity, we're here to ensure that physics delivers on its exceptional potential to benefit society. Alongside professional support for our members, we engage with policymakers and the public to increase awareness and understanding of the value that physics holds for all of us.

We agree with the aspiration and focus of the Strategy, and welcome the commitments to giving children the best start in life, to raising standards, and to providing development for the education workforce. However, while the Strategy lays down a number of agreeable principles, we would like to see more detail on certain elements of the Strategy, and have some particular areas we would like to highlight under the following Strategic Priorities.

Learning needs of children and young people

The Strategy outlines a goal for “young people [to] develop aspirations for the future”, but further detail is needed both to set educational outcomes preparing students for employment in areas which are identified as needing significant workforce in the future, and in the need for much more investment in wider careers advice. In terms of aspiration and workforce planning, engagement with the work of MATRIX would be welcome; particularly if this strategy is to fully support the economy and the Programme for Government. In addition, there is a huge need for investment in effective careers advice across Northern Ireland, particularly with regards to STEM careers. Effective careers advice could encourage more students into STEM careers which have higher salaries than average and will be important for Northern Ireland's future economic development.

All our people

The aspirations within the Strategy envisaging “a workforce that is highly capable engaged and empowered” and to “develop people who work across boundaries as part of multi-disciplinary teams” are both very welcome. However, we would like to see how the Strategy aims to encourage and help schools invest in continuing professional development (CPD) for teachers within schools, including pedagogy and teaching within the classroom. The IOP has a lot of experience in supporting teachers to develop increased confidence in teaching physics, through subject-specific CPD in schools in England and Wales, and we would be happy to work with EA on this topic in Northern Ireland. In addition, subject specific support programmes such as the

Primary Teaching Trusts support for Primary science quality mark appear to have had a positive impact on those schools participating.

Resources

With the aim that resources are used in a sustainable way, we would caution against the risk of duplicating existing programmes which are proving successful in pursuit of the Strategy's other aims. We would recommend fully reviewing the existing programmes and provisions available which support the Strategy's aims before investing in new programmes, as well as examples from the rest of the UK. For example, in pursuit of multidisciplinary STEM based improvement strategies, the Teacher Effectiveness Enhancement Programme from SSAT, which has had support from the Gatsby and Sutton Trusts, has outcomes which could be replicated across Northern Ireland. In addition the Institute of Physics has three teacher network co-ordinators in Northern Ireland who work closely with teachers of physics to support them through a range of activities which have been developed by the Institute.¹

Excellence

The Strategy should identify clear strategies for which other educational or stakeholder groups the EA will be working with in making progress in their Strategy. We would recommend engaging with: the NI Physics Teachers Panel; the Association for Science Education, who run annual conferences for teachers; and the Royal Society of Chemistry, who like the IOP also provide school CPD and support and support the shared education science cluster. More use could also be made of the Royal Society of Biology, Society of Microbiology, and Science and Plants in Schools.

The Institute of Physics would welcome working with the EA in certain areas, and we would appreciate the opportunity to meet to discuss how we might work together on this in future.

We look forward to working with the Education Authority on the implementation of its Strategy, and on other issues in the future.

Yours faithfully,



Mark Lang
Chair, IOP Ireland

¹ See for example <http://www.iop.org/education/teacher/index.html>