

Stimulating Physics Network Lead Schools

Stimulating Physics Lead Schools will act as the hub of an active local network of schools and physics teachers. These networks will operate on the principles that (a) the most effective mechanism for improving pupils' learning and outcomes is through the provision of high-quality CPD for their teachers, and (b) all those involved in the teaching of physics, including teachers without a specialist background, trainee and recently-qualified teachers, primary teachers and technicians, should have access to high-quality CPD and peer networking opportunities.

The Physics Lead School will provide and facilitate these opportunities, hosting events and undertaking outreach to nearby schools. Supported by the Institute of Physics and its field teams, the Physics Lead School will develop and deliver a coherent programme for its local network based on identified needs of the participating teachers, schools and clusters.

The SPN is particularly focused on addressing the issue of **gender balance** in subject participation and attainment, both in physics and across the school. We would be keen to see all Lead Schools addressing this issue; the Institute can provide significant support in developing and evaluating bespoke interventions involving the whole school.

School-based Physics Coach

The school will nominate a suitably-qualified individual as a school-based physics coach (SPC). The SPC will be responsible for leading regular physics CPD workshops at the Lead School, coordinating local network activities (supported by the IOP's head office) and also engaging in outreach, running teacher CPD and pupil engagement activities at nearby SPN partner schools, as opportunity allows.

The SPC would have the support of an experienced IOP-employed coach, working with them on a one-to-one basis, and also the wider SPN team of coaches, mentors, team leaders and office staff.

SPCs will be invited to participate in regional 'physics CPD symposia' which will be organised by the IOP for all physics CPD providers, as a mechanism to develop coaching practice and support practitioners towards the achievement of chartered physicist status (CPhys). This is part of the Institute's long-term aim to professionalize physics CPD and physics teaching in schools.

Commitments and funding

Lead School status represents a significant commitment by both the school and the DfE, which funds the SPN project. We will second the SPC to the Institute of Physics for a minimum of 12 months for one day per week (0.2 FTE), with the next cohort starting work in **September 2017**. The secondment agreement will cover the SPC's salary costs (including employer contributions) up to about **£10,000 per annum** plus expenses (travel, subsistence and event costs).

It is important that this arrangement be built into the SPC's timetable from the outset, so we are keen to make at least provisional arrangements as soon as possible, as you're undoubtedly planning your timetabling and staffing for 2017-18 imminently.

The national objective

We believe that the future of the SPN project lies in the mobilisation of school-based practitioners as leaders of high-quality CPD, supported by the IOP and the experience of its existing teams.

In 2016-17 we appointed our first trailblazer cohort of 8 Lead Schools, selecting from those with prior experience of working with the SPN project. These schools are now all operating successfully

and we are learning lessons from their experience for next year. We would now like to broaden the invitation to include all schools with appropriate expertise and capacity, including Teaching Schools.

By March 2019 we aim to have established 50 Physics Lead Schools across England, each with an active local network of partner schools, comprising perhaps 500 schools in total.

By 2019 we hope to have demonstrated the value, potency and efficacy of the Lead School model for driving up teacher quality and improving pupils' outcomes; we will then be in a position to explore alternative funding models to ensure that these local networks become a permanent feature of the educational landscape, negotiating with government, industry, schools and other charities and learned societies as required.

Benefits of Physics Lead School status

Acting as a Physics Lead School will have significant benefits for your school. The school will become recognised as a centre for excellence in both the teaching of physics and school-based physics CPD. It will demonstrate its commitment to and capacity for school-to-school support and leading local partnerships and collaboration. With the support of the IOP's experienced communications and marketing teams, its profile will be raised at both local and national level. Since its own staff will be the main beneficiaries of CPD activity, the quality of physics teaching will be boosted and pupils' outcomes will be improved; patterns of gender imbalance in physics (and other subjects) may also be overcome.

For the designated SPC there are also significant benefits and opportunities. Firstly, by considering the common issues and challenges in teaching physics, their own practice as a teacher can be expected to improve – and thus their own pupils' outcomes.

Gaining experience of working with other teachers will enhance the SPC's professional credentials and afford a unique and engaging challenge and open up alternative career pathways into school-based teacher training, curriculum development and/or policy work.

The SPC role could therefore be considered as a retention mechanism for existing staff, or a recruitment aid; if the school is likely to have a vacancy for a physics teacher in September 2017, offering one day per week for outreach work may attract more experienced candidates. We are happy to advise on the application and recruitment process if required, bearing in mind that the candidate will be the school's employee.

Success criteria and evaluation

The success criteria for each Lead School will be tied into those of the wider SPN project. The school will submit regular activity reports to the IOP which will collate input (e.g. teacher-hours of CPD) and output (e.g. teacher feedback) data as part of our programme reports to the DfE. External evaluation of the SPN project will be completed annually, including surveys of teachers and interviews with the SPC.

Lead School status will be reviewed annually against these criteria and renewed or discontinued as appropriate.

The selection process: 2017-18 cohort

Visit www.stimulatingphysics.org/lead for details of the application and selection process, and to submit an electronic application.
