IOP Institute of Physics

Future Physics Leaders

Sustainability and Legacy

The Future Physics Leaders (FPL) programme is specifically designed to build a selfsustaining network for continuing professional development (CPD). The approach is to increase the capability and capacity within each Lot for providing school-led CPD and mentoring support. External Development Coaches will initially be required; however, through the life of the programme, interventions will identify, import and nurture local School-Based Development Coaches and build links with Partner Schools to enable schools, in the long-term, to provide independent and self-sustained CPD support.

FPL will establish **Construction** Hubs in each Lot; with each Hub comprising one Lead School, which has at least one experienced physics teacher (the Lead Teacher), as well as **Construction** Partner School. The Partner Schools will have a mixture of specialist and non-specialist teachers of physics, who, through the network of local schools and teachers developed by the programme, can provide informal support to one another through increased contact and exposure, as well as formal support through professional development led by a Development Coach.

Initially, the Development Coach will be provided and funded by the programme. The Development Coach will:

- Run a coherent development programme for Lead Teachers to develop them as future School-Based Development Coaches;
- Lead CPD for specialist physics teachers in Partner Schools to support and develop their professional skills as emerging Lead Teachers;
- Provide mentoring support and a coherent development programme for newly qualified physics teachers; and
- Lead CPD for non-specialist teachers to develop their pedagogic content knowledge in the teaching of physics.

Through the programme, Lead Teachers will be trained to become the new Development Coaches, called the School-Based Development Coach. These new School-Based Development Coaches will continue the cycle of training teachers in local Partner Schools and identifying new Lead Teachers within their network. They will be supported in their coaching practice, beyond the end of the funded programme, by regional symposia provided by the IOP.

Starting in the second year of the project, where possible, Lead Teachers will also contribute to the mentoring programme for newly qualified specialist physics teachers. It is envisioned that linking newly qualified specialist physics teachers with other local specialist physics teachers will enable these teachers to develop quickly and encourage teacher retention in both the profession and in the region. After 3 years, these newly qualified teachers will be in a position to join the programme to become a Lead Teacher themselves, with training coming from the School-Based Development Coach and the IOP.

In this way, the programme will sustain and nurture a structure in which there are local School-Based Development Coaches who support, develop and help to retain existing physics teachers and newly qualified physics teachers in order to become the next generation of Lead Teachers and School-Based Development Coaches. This cycle will ensure that the CPD offering for the area will continue into the future and grow the capability and capacity for providing CPD to more schools and teachers within the region.



Continued Running Costs

The continuation of CPD will not require specific external funding: sessions will be held in a Lead School led by a School-Based Development Coach. They will run the CPD offering for teachers in Partner Schools and the professional development of the future School-Based Development Coach. As with all CPD, any funding will be arranged between schools.

The IOP will provide network days for teachers and symposia for supporting School-Based Development Coaches, Lead Teachers and emerging Lead Teachers. It will also provide resources and materials for Lead Teachers and School-Based Development Coaches, including *Coaching Guides, Supporting Physics Teaching, Teaching Advanced Physics* and links to evidence about students and adult learning of physics. In addition, the IOP will provide all teachers, at no cost, access to its TalkPhysics on-line professional forum, which includes access to a knowledgeable physics community of over 9000 members and a host of resources for teachers, such as an events platform through which Hubs can advertise their CPD activities to schools within and outside of their Hub.

Sharing Best Practices

With the model and process in place for a sustainable CPD solution, the IOP will work to ensure that the CPD offered through this programme is supporting meaningful development in schools. To do this, the IOP will solicit feedback from participants throughout the life of the project that measure teacher satisfaction with the programme including the value of the CPD on offer, the administration of activities and activities' impact on pupils' learning, attainments and participation in physics including relevant pupil-level data. This will help to ensure that teachers are receiving a valuable product through the Hub model and enable the IOP to adjust its offering in areas that are not achieving the desired results. This information will also be shared with the external evaluator to ensure that best practices are captured.