



**Researchers
in Schools**


Parliament Hill School



Parliament Hill School and Lampton LWA SCITT Case Study

Parliament Hill School is a larger than average all-girl school in the borough of Camden, north-west London. The school has a large sixth form, part of a collaborative mixed sixth-form consortium with three other schools in the area. The proportion of students eligible for the pupil premium is well above the national average.

The school received a 'Good' judgement from OFSTED (November 2013). Overall, 66% of pupils achieved 5 A* – C grades, including maths and English in 2016. The school is part of the Lampton LWA SCITT, which provides teacher training for new teachers, including Researchers in Schools participants.

Researchers in Schools Partnership

RIS began working with Parliament Hill in September 2015 through the Lampton London West Alliance SCITT and initially placed 1 maths participant. In September 2016, Parliament Hill placed an additional participant in maths as well as 1 physics and 1 History.

The programme involves participants being placed for an initial three years, during which they train to teach and then work as qualified teachers. Whilst on the programme, participants have one day off-timetable per week to work towards the aims of the programme: championing university access, disseminating subject expertise and promoting research.

This includes running the Uni Pathways programme: participants work with a small group of Year 10 pupils over Year 1 and Year 2 of the programme, delivering university-style learning, supporting their attainment and university readiness. These university-style tutorials are based on previous research completed by participants at postgraduate level.

Lampton LWA SCITT is based at Lampton School, an academy and teaching school in Hounslow, London. Lampton is a founding partner of the RIS programme and continues to work with RIS as a Lead Partner School, placing participants through its London West Alliance.

Participants

Dr Cheryl Knowland (RIS 2015 maths participant)



Dr Cheryl Knowland completed her PhD at the University of Liverpool predicting the effects of climate change on marine sessile communities.

Uni Pathways Titles

Year 1: *How many fish are in the ocean?*

Year 2: *Making predictions; an introduction to coding in R*

Dr Catherine McEvoy (RIS 2016 physics participant)



Dr Catherine McEvoy gained a PhD in high resolution studies of interstellar and stellar absorption lines in the optical spectra of OB-type stars at Queen's University Belfast.

Uni Pathways Title

Year 1: *Eyes on the Skies: The Best Telescopes in the World*

Dr Sanfo Agyo (RIS 2016 maths participant)



Dr Sanfo Agyo completed his PhD in Bi-fractional transforms in phase space at the University of Bradford.

Uni Pathways Title

Year 1: *Protecting Information using Mathematics*

Dr Jack Reilly (RIS 2016 history participant)



Dr Jack Reilly completed his PhD in Time, Narrative, and the Political: The Dislocated Logic of Political Foundations at UCL.

Uni Pathways Title

Year 1: *Freedom, Equality, and Order: Theoretical Approaches to Political Origins*

School Perspective

Sue Higgins, Headteacher

Researchers in Schools has been a good experience for Parliament Hill School and we have had excellent trainees through this route. They have been keen to get involved in a wide range of school activities, from giving great subject-specific talks to our Sixth Formers, helping with university applications, leading research projects with students, running competitions based on their areas of expertise to tutoring on the EPQ qualification. We've been really impressed by the quality of these colleagues.

Joy Morgan, Professional Tutor

The Researchers in Schools have been fantastic and have fitted in so well, adding capacity and using their expertise to help in so many ways. The current trainees are leading on the Students as Researchers project with Year 9, training students to carry out high level research on topics that the school wants to develop, again providing them with the skills they will need for the Extended Project Qualification and university applications. This is in addition to the Brilliant Club's Scholars Programme that we already have operating at Parliament Hill.

Our experience with 4 RIS trainees has been excellent; they are enthusiastic, committed, hard-working, learn fast, flexible, and exceptionally knowledgeable about their subject areas.

Aoife Meenan, Subject Mentor for physics

Uni Pathways has quite clearly encouraged a more positive attitude towards physics. It has allowed the students to further their learning on telescopes. Since the launch of Uni Pathways this year, we have spent an evening at a prestigious university, a trip to the Royal Observatory and a conference call with Dr Liz Bartlett at ESO Santiago. Space is a popular topic among physics students and the students were able to deepen their understanding of it. All the students involved in Uni Pathways course have thoroughly enjoyed it; their attitudes towards physics as a whole has improved and there is a strong sense of pride amongst them.

Dr Jack Reilly, 2016 history participant

The RIS programme is an excellent teacher training scheme for PhD holders. I have made a difference to pupils through the Uni Pathways course which provides a forum for trainee teachers on the RIS programme to introduce Year 10 pupils to topics they might go on to study at university.

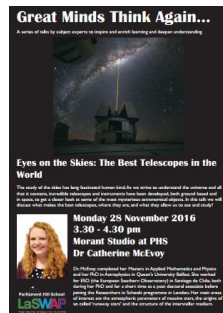
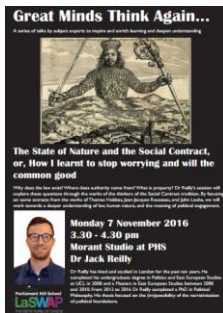
Rachel Lawrence, RIS Hub Director at Lampton LWA SCITT

The teachers have also shown great commitment and pastoral concern for their students. Their approach to teaching is innovative and imaginative and they have enriched the departments that they work in. I would whole heartedly recommend the RIS programme to other schools. We have recruited excellent teachers, who are highly trained subject specialists with a real commitment to helping students from disadvantaged backgrounds have the very best educational opportunities. As the teachers go on to become more experienced their contribution to the schools that they are in will continue to grow.

Super-curricular Impact

The participants at Parliament Hill have been involved in a series of seminar sessions entitled: Great Minds Think Again. The sessions, open to both pupils and stakeholders, are based on the participant's research and are designed to enrich learning and deepen understanding.

- 'Eyes on the Skies: The Best Telescopes in the World'
- 'Antarctica: Untouched Wilderness or Untapped Resource?'
- 'The State of Nature and the Social Contract'
- 'Protecting Online Data using mathematics'



Year 11 Pupil who attended Dr Knowland's 'Antarctica: Untouched Wilderness or Untapped Resource?'

I found the session very informative and an interesting combination of subjects. It gave us an idea of where geography and maths can take us and ideas to blend subjects to create a profession.

Subject Impact

RIS participants have also brought a wealth of experience and knowledge to their departments as well as delivering targeted university-style tutorials to pupils through the Uni Pathways courses.

Dr Catherine McEvoy, 2016 physics participant

The Uni Pathways course gives the students a unique opportunity to work on an individual project that they can take real ownership of. The students get to access subjects beyond the curriculum and see their teachers in a new light. The girls have loved having the chance to speak to experts from ESO and to independently research an astronomical object of their choice. One has even decided that she might like a career in astronomy when she leaves school!

Jeff Hughes, Subject Mentor for mathematics

Researchers in Schools have provided a fresh perspective on the work that we are doing, whether that is the rigour of a pure mathematician or the relevant real-world applications of a cryptographer or marine biologist. Any trainee promotes reflection on our own practice within the department but joint planning or mentoring with a RIS participant is an additional privilege and pleasure as it is a collaboration with an expert professional who has worked at the cutting edge of research.

