



making physics matter



# Teach Physics internship programme

## 2010-2020

### Teach Physics

The Ogden Trust Teach Physics programme started in 2010 with 12 interns in five schools; a total of 410 internship placements have since been made. In 2019, 47 interns completed placements at 42 schools. Before the COVID-19 hiatus, 108 undergraduates had been placed across 95 different schools for placements due to take place in summer 2020, which is a significant increase on all previous years.



Some people know from an early age that they want to be a physics teacher, but for many they have a positive and sometimes transformative experience as an undergraduate working with students that opens up teaching as a career path. The Teach Physics internship programme provides exactly this type of experience and, based on the very pleasing numbers of interns who have gone on to teaching, is certainly doing the right things. Even for those whose futures lie outside the classroom, it provides an enriching experience for all involved. The Ogden Trust Teach Physics internship programme is one that is special, worthwhile and valuable for universities, undergraduates, schools, teachers and students. We are delighted to see it continuing into its eleventh year and beyond.

**James de Winter, University of Cambridge, Faculty of Education, Affiliated Lecturer in Science Education  
Ogden Trust lead for initial teacher education & early career teacher development**



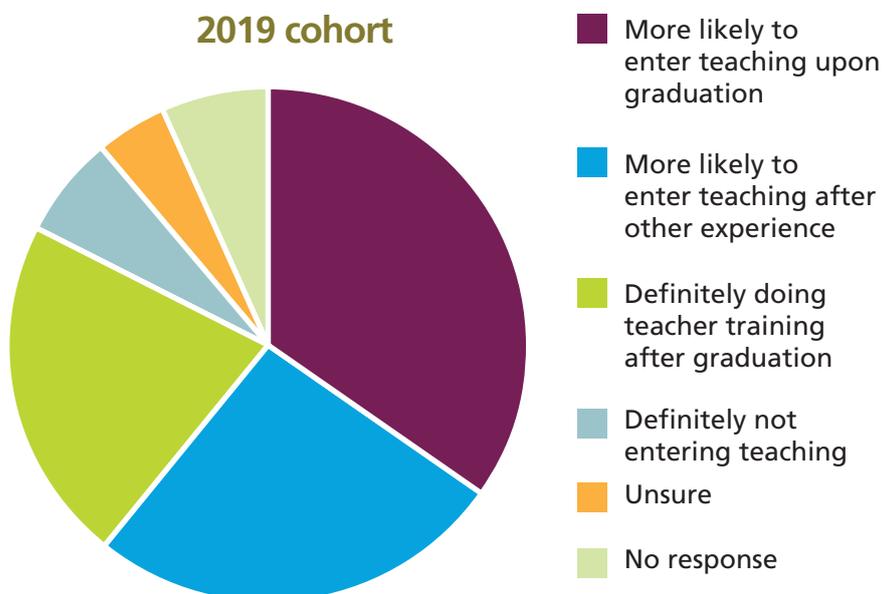
The **Teach Physics programme** places physics undergraduates at state schools for a four- to five-week intensive, immersive teaching experience. The objectives of the programme are to increase the number of physics graduates choosing to train as physics teachers and to increase the number of physics specialists teaching science in state schools.

Based in a school physics department, the interns are supported and mentored by experienced teachers. Each intern must prepare and deliver at least one independent physics lesson and a physics-based careers presentation; they often create curriculum-based resources and support extra-curricular clubs. Interns are encouraged to take part in school trips, transition days, staff planning and meetings, and to support other end of term activities.

The programme provides a realistic insight into teaching physics and to broader school life, as well as enabling the intern to develop transferable skills to bring to their studies and future careers. The interns bring subject knowledge and enthusiasm into schools, inspiring students (and teachers) with ideas and insight into university life, as well as offering additional support at a typically busy time in the school calendar.

## The latest figures

We asked the most recent cohort (2019) of 47 interns what the likelihood was of them applying for teacher training after their internship experience. The majority of them indicated they were far more likely to enter teaching, perhaps after gaining experience in other fields. Nine are already doing teacher training having graduated. This is, therefore, a promising indicator that the programme is encouraging students into teaching.



Being able to take part in all aspects of school life made me feel included and gave me a first-hand insight into everything that goes on behind the scenes at a school – delivering in class is only part of it – every day is different and there is always something to plan for or look forward to! Throughout my placement, I learnt different techniques for classroom management and maintaining discipline; I learnt the importance of lesson planning, practice, structure and time management; and the importance of proactively engaging with students – especially those who might be more challenging. My confidence skyrocketed during my placement and I loved every minute of it.

James Brocklehurst, Teach Physics intern 2019



## The longer term picture



**215**

Teach Physics  
interns tracked  
since 2010



**44%**

teaching or in  
teacher training



**9%**

involved in science  
education, outreach  
or tutoring

We have been able to informally follow the progress of 215 interns since the beginning of the programme; of those who are not still in education, 71 are currently teaching or in teacher training, while a further 14 are involved in some form of science education, outreach or tutoring.

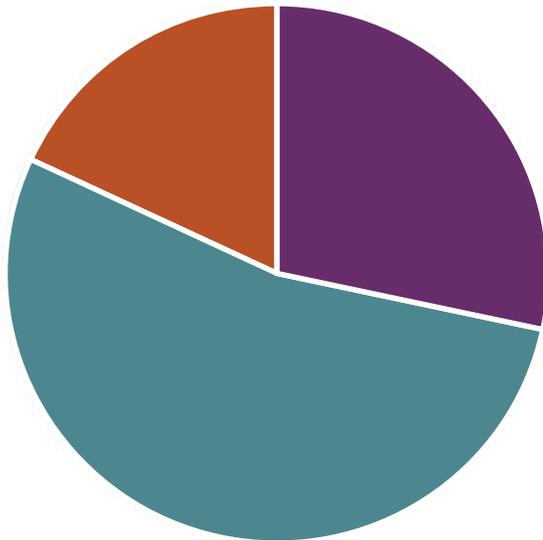
It is difficult to track the long-term career progression of Teach Physics interns. There can be a number of years between the student doing an internship and graduating; and university email addresses, which the students typically use for their applications, are often unavailable after the student graduates. If a former intern comes into teaching after a different career, we will normally only know if they actively tell us.

In order to best track our interns, we have used multiple methods to gather and collate information. We have attempted to track careers using public records and through direct communication where we have valid telephone numbers and email addresses. In addition, a number of destination-tracking surveys throughout the years have been compiled, although the response rate to surveys is not always high.

## Teach Physics interns 2010-2016 vs 2010-2020 – where are they now?

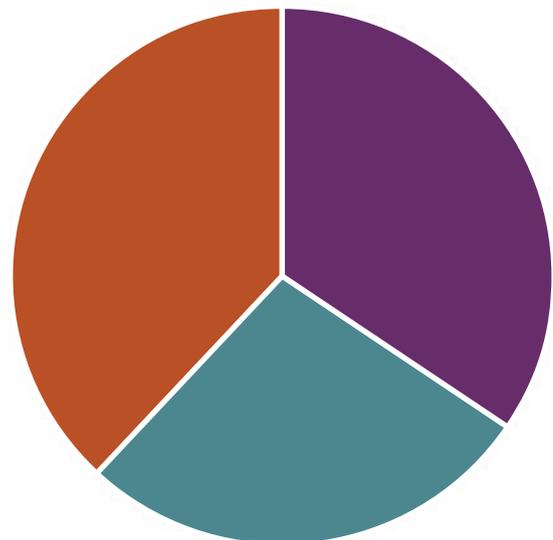
We have compared significant destination data compiled in 2016 and 2020. As to be expected, there is a significant reduction in the number of former interns still studying, as the majority of them have now graduated. However, the most pleasing aspect of the data is that there is a far larger proportion of former interns in work who are in teaching (or teacher training/some form of science outreach) than before.

### Where are they now (2010-2016)?



■ Not teaching ■ Still studying  
■ Teaching/training/outreach

### Where are they now (2010-2019)?



■ Not teaching ■ Still studying  
■ Teaching/training/outreach

Under 18 per cent of our Teach Physics participants responded to our recent destination survey. Of the 72 responses we received, 13 are yet to graduate from their undergraduate degrees, 24 are in postgraduate education, including teacher training, and a further 19 are working towards PhDs. Of the former interns who are working but currently not in teaching, 70 per cent said they would consider entering teaching at a later stage. Those who said they would never return to teaching indicated this was to do with the high levels of stress and administrative work involved in teaching compared to the low pay.

Over 70 per cent of the former interns had continued to be involved with some kind of science outreach or volunteering since their time as an intern. The seven former interns who had completed teacher training but were no longer teaching had chosen to enter the civil service, the financial sector or private tutoring.



I completed my Teach Physics internship at a local 11-18 school in 2014. Teaching had always appealed to me but being able to spend five weeks in a school, experiencing the day-to-day life, really secured in my mind that it was the career for me. I have now been teaching for more than five years and have gained a middle leadership role.

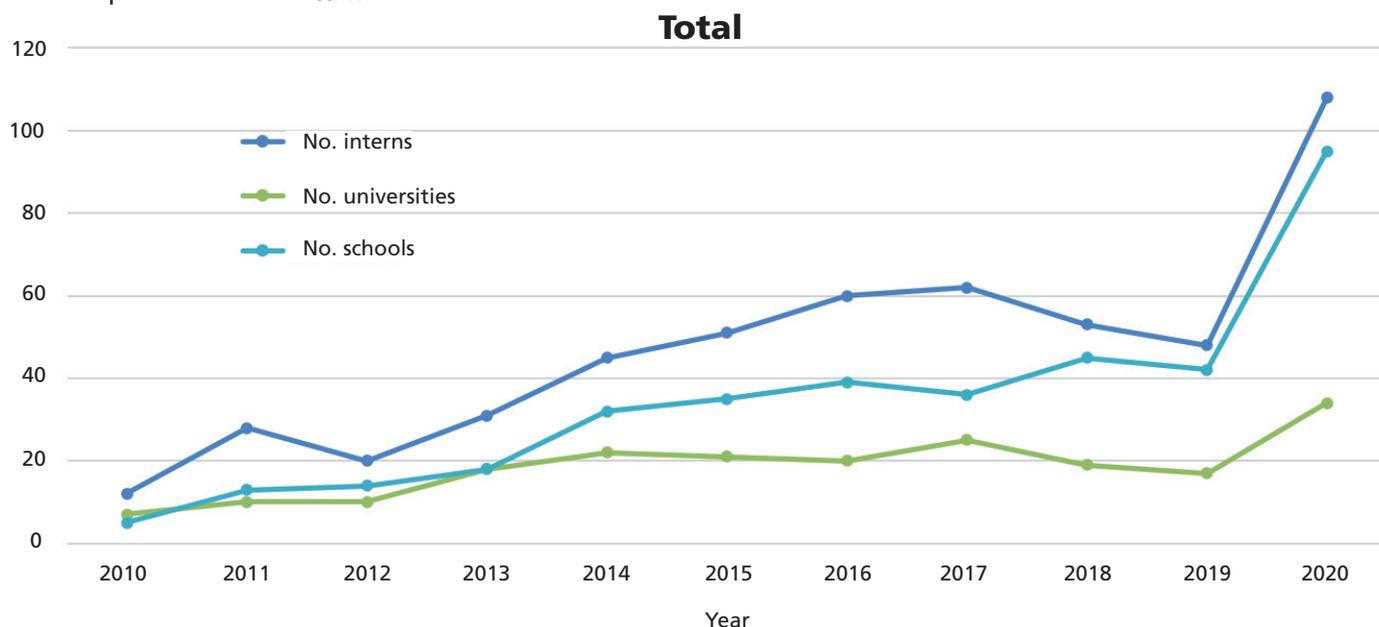
Doing the internship really prepared me for my teaching because I was able to see the workload that teachers have as well as how rewarding a career working with students can be. We have also now hosted a Teach Physics intern. It was a great experience to be on the other side of the intern process. Their contribution to school life was invaluable and really helped enrich the experience of our physics students.

**Lauren Stephenson, Teach Physics intern (2014), KS3 Science Co-ordinator  
St Mary's Catholic Academy, Blackpool**



## Participation

The Teach Physics programme is open to physics undergraduates at UK universities who can be placed in English schools and are eligible to teach in the UK upon graduation. The programme is predominantly limited to schools in England because of term-time availability. We have seen interns from 56 different universities and a general increase in interest to take part in the scheme from both undergraduates and schools, and we hope to continue to build upon this momentum.



We have been involved in the Teach Physics programme since its inception and have had nine interns at the school. All of them have gained a true insight into physics teaching as a career. We have been really fortunate to recruit two physics teachers who were former interns. They have come to us with enthusiasm and realism, with their eyes open as to what teaching involves, and have been better trainee teachers as a result of their previous Teach Physics experience.

**Henry Hammond, Science Director, Alexandra Park School**



## Evaluation review

Anecdotal feedback and qualitative evaluation over the first 10 years of the programme has shown that the scheme is positively perceived by the interns and the schools at which they are placed. Evaluation from the end of each programme shows that the scheme has a predominantly positive impact on intentions to go into teaching; schools also use the scheme to help them recruit high-quality trainee teachers.

Longer term statistics on future destinations/further outcomes is not comprehensive and a more systematic evaluation process is being established. Further support is also now available for those that go into physics teaching which will hopefully help us to maintain contact with our interns as their careers progress. Our Teacher Network provides ongoing professional development experiences for teachers of physics, including mentoring and CPD for newly and recently qualified teachers, and an Early Career Teacher Development programme to support physics teachers who are between their second and fifth year of teaching post qualifying.

**If your school is interested in hosting an intern in 2021, please visit [www.ogdentrust.com/teachphysics](http://www.ogdentrust.com/teachphysics) for more information.**

**The 2021 Teach Physics programme will open for applications in December 2020.**