

## SEPnet Outreach and Public Engagement Framework

SEPnet has a range of programmes targeted at different audiences and age groups. These can be delivered individually or as part of a joined-up programme which embeds STEM and physics engagement within a community. Communities should be targeted based on the proportion of people from underrepresented groups in physics. This document is a framework based on the core aims and programmes in the SEPnet Outreach and Public Engagement strategy.

The below lays out a framework for our engagement with young people. SEPnet also has teacher continual professional development (CPD) resources available which would have most impact if targeted at the same schools that workshops are delivered in. These activities should be supplemented by public engagement programmes which also work with the same communities. This will serve to support science capital and aspiration within the community.

SEPnet's Outreach and Public Engagement programme is designed to feed into recruitment processes at our universities. We work closely with recruitment and widening participation teams at our partner universities to ensure we are targeting schools where pupils will later be supported on their journey when applying to study at university.

The framework includes all interventions across age groups. This is not intended to be a delivery plan for a single university as there will not be enough capacity to deliver all programmes. It provides a framework universities can use to select which engagements they will provide in their programme. At the bottom of this document there is an example from one of our partners (the Institute of Cosmology and Gravitation at the University of Portsmouth) demonstrating how this can be put into practice.

Programme	Audience and age group	Location	Comments
Early Years Storytelling	Under 5s along with parents/ guardians/ adult influencers	Community spaces (e.g. community centres, libraries). Spaces serving catchment area of target schools for school interventions.	This programme is designed to reach community spaces and to raise the science awareness and confidence of those who care for children.
<i>Primary career workshops*</i>	<i>Year 3 primary school</i>	<i>Primary schools which serve as feeders to target secondaries.</i>	<i>Double intervention programme based on careers. These aim to prevent children from disassociating with science at an early age.</i>
Late primary intervention	Year 5 or 6 primary school	Same primary schools as Y3 workshop.	Can use any local activity or external resource here e.g. Tactile Universe have workshops aimed at this age group.
First Secondary Intervention	Year 7 secondary school	Working with secondary schools embedded into	Can use any local activity or external resource.

		community you have been working with. They will have many children from the feeder primary schools targeted. SEPnet recommend having 3 target secondary schools.	
Secondary multi intervention programme	Year 8 secondary	Same secondary schools	Either Connect Physics or Shattering Stereotypes – both sets of three workshops to be delivered over the course of a year. Connect Physics aims to communicate that anyone can be a physicist. Shattering Stereotypes tackles gender stereotyping in subject choice.
Mid Secondary Intervention	Year 9 secondary	Same secondary schools	Can use any local activity or external resource.
Late secondary Intervention	Year 10/11	Same secondary schools brought onto campus	Activity to support journey into science and introduction to university. E.g. discovery days, masterclasses.
WP/ University follow up  Recruitment talks from SEPnet departments/ academics	Y11+	Same secondary schools, either in school or on campus	At this point wider university programmes should take over the engagement with schools to support their potential path to HE. This may be through recruitment events, taster days etc.

\*currently in development with aim to pilot in 2021-22

### Example programme from the ICG in the University of Portsmouth

The Institute of Cosmology and Gravitation (ICG) work with 3 partner secondary schools and 8 primary/junior schools which act as feeder schools to these secondaries. The ICG run an annual public Stargazing event at Portsmouth Historic Dockyard partnering with the National Museum of the Royal Navy. It is a family event and consists of drop in stalls, talks and activities at the Dockyard. Since starting the new schools programme, audience focus for the Stargazing event is shifting towards targeting the communities within which the secondary schools sit.

Programme	Audience and age group	Location	Comments
<i>Primary career workshops **</i>	<i>Year 3 primary school</i>	<i>Primary schools which serve as feeders to target secondaries.</i>	<i>Primary careers programme</i>
Late primary intervention	Year 5 or 6 primary school	Same primary schools as Y3 workshop.	Two visits, one themed around the solar system and one themed around galaxies (similar to the Tactile Universe workshops). Entire year group. Delivered when school is doing the 'space' topic.
First Secondary Intervention	Year 7 partner secondary school	Partner secondary schools	Astrodome planetarium shows. Entire year group (requires multiple visits).
Secondary multi intervention programme	Year 8 same secondary school	Same secondary schools	Connect Physics. Entire year group (requires multiple visits).
Late secondary Intervention	Year 10 same secondary school	University campus	Discover Astrophysics event (masterclass). Each secondary school offered up to 90 places. Any places not taken up by partner schools are offered to other university WP target schools by the central university outreach team.
University follow up	Y12/13 all local colleges		Physics outreach and recruitment activities to key stage 5 students, including Physics Taster Days at the university and talks in colleges, is organised through the Faculty of Technology.

\*\* aim to be added into programme as part of 2021-22 pilot

The ICG programme is led and delivered by a 1.0 FTE core OPE staff member (Senior Public Engagement and Outreach Fellow) with support from student Outreach Demonstrators for school events. The ICG also has a 1.0 FTE Public Engagement and Outreach Fellow whose main responsibility is to lead a specific public engagement project, but who also contributes to the running of this programme when required. There are two Academic Champions for Public Engagement with increased allocation for public engagement in their workload plan. The annual departmental OPE budget is £15k, with approximately £8,800 used for schools outreach (incl. £7,500 to pay student Outreach Demonstrators), £2,000 for public engagement, £2,200 for OPE team CPD and meetings, and £2,000 for miscellaneous kit and equipment. Additional funding for public engagement comes from a variety of sources, including external public engagement grants, research grants, and internal investment proposals.