

Haringey Science, Technology, Engineering and Maths (STEM) Commission

Haringey STEM Commission Evidence Session 1 – Meeting Note

In attendance:

- Baroness Morgan of Huyton – Chair of the Haringey STEM Commission
- Michael McKenzie – Haringey STEM Commission
- Maggie Philbin – Haringey STEM Commission

- Stavroulla Cairns - Project Manager Values Based recruitment and Apprenticeships, North Middlesex University Hospital NHS Trust
- Shanti Chahal - Staff Engagement Support Officer, North Middlesex University Hospital NHS Trust
- Katherine Gerrans, Lead Nurse & Quality Workforce Manager, Haringey Clinical Commissioning Group
- Dr Hilary Leever, Head of Education and Learning, The Wellcome Trust
- Carl Wadey, Director of Learning (Science and Technology), Tottenham UTC

- Zina Etheridge – Deputy Chief Executive, LB Haringey
- Sam Elliot –Project Manager, Haringey STEM Commission

Themes Considered

Career paths, vacancies and shortages

The Commission heard about the enormous range of careers in the health sectors, from clinical practice and laboratory work through to back office functions like management and accountancy. The excellent [NHS Careers website](#) lists the kind of roles students can aspire to, the skills and qualifications required, and the career path such roles can lead to.

Entry to the health service is supported by training schemes and apprenticeship programmes. North Middlesex offers an [expanding range of apprenticeships](#) in both clinical and non-clinical areas. New and emerging areas such as healthcare science have initiatives like the [NHS Practitioner Training Programme](#).

There remain shortages and many vacancies are difficult to recruit to. Speakers identified a number of specific roles and areas - healthcare support, radiography, occupational therapy, physiotherapy, health visiting and nursing.

Commissioners asked for one day snapshot of current vacancies to give an illustration of the specific jobs being recruited to.

It was noted that increased specialisation and developing links between hospitals and major research centres would also change the kinds of roles on offer. Another factor was the outsourcing of procedures like lab work, often to overseas institutions.

Barriers to careers in the NHS

Commissioners asked about the barriers that might be preventing young people entering the health workforce.

It was important to demystify the various roles that young people could aspire to. Witnesses emphasised the importance of good quality careers advice and role models. Tottenham UTC reported the success of schemes like STEM Ambassadors for improving this element

The reduction in regular work experience placements for young people in many schools was felt to be a gap. Asked how the Commission might be able to recommend broadening the work experience offer, witnesses cited the usefulness of large scale work experience events as well as recruitment fairs – not just locally but at a larger scale such as those hosted by e.g. [the BMJ](#).

Participation

Commissioners asked how Haringey might support efforts to promote the take-up of STEM subjects and to increase participation.

The importance of good quality teaching was emphasised and in particular the need for specialist teachers, especially at primary school level. There are shortages of teachers in maths and physics in particular.

The Wellcome Trust reported that research showed that young people already have fixed ideas about science by the end of primary school, and that it was important to engage them at a young age.

Maths was felt to be the priority subject in order for young people to keep their careers options open and as a vital transferrable skill.

Enhancement and enrichment activities were also highlighted as an important tool. [Teen Tech' City of Tomorrow](#) project is one example.

Possible Recommendations

The Commission asked attendees to consider what recommendations they could make to help

Communication and information sharing

It was clear from the discussion that there were a significant amount of resources that schools and teachers could draw on. The [National STEM Centre](#) is building the largest collection of

resources for STEM educators in the UK, while the [National Science Learning Centre](#) provides professional development, bursaries and funding for STEM teachers.

There are a number of opportunities for teachers to enhance their subject knowledge and skills, e.g. the [Association for Science Education](#), and a range of enhancement and enrichment activities that could be introduced to schools to build participation and enthusiasm, e.g. Code Clubs, BBC Micro Bit.

However, it was not always clear whether schools and teachers knew about these opportunities or were able to take best advantage of them. Is there a role for the local authority in facilitating a network for information sharing and professional development for science specialists? Any proposal would need to be sustainable in the current funding

Governors

The Wellcome Trust recommended working closely with [school governors](#). Schools may want to consider having subject-specific link governors. The council might encourage professionals from STEM sectors to become school governors and to in turn bring the benefit of their experience and networks to supporting STEM provision in schools.

Expanded Curriculum

The Commission were encouraged to look at opportunities to expand and innovate through the curriculum where possible, taking into account funding and timetabling restrictions.

The new post 16 [Core Maths](#) qualifications offer more opportunities for young people to continue studying mathematics in addition to other A Level courses.

The [Extended Project Qualification](#) may also be a way to offer additional ways of exploring STEM subjects, and may serve as a model – could an EPQ-type course be developed at primary level?