

A decade of STEM Outreach & Widening Participation Activities: Lessons Learned and Challenges

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With renewed emphasis placed on boosting STEM skills in the Modern Industrial Strategy, what provisions can be made for schools to directly promote greater uptake of science at both A-level and at university and consequently to encourage greater numbers of students into careers in science? Making STEM subjects accessible and studying science offers a wide range of options following school - whether that's a career in medicine, engineering or teaching science in the classroom these are the vital skills needed for the future productivity and economic prosperity of any modern 21st century country.

What factors should be considered in promoting the participation of under-represented groups such as girls and disabled people in science -including girls' and disabled decisions around choosing science, the influence of parents, society and extrinsic factors such as the direct benefit and impact of a science career on a community? What lessons can be learnt by ICTP from high-profile media campaigns and initiatives to generate enthusiasm for studying science from a young age by people with disability? How can ICTP play a larger role in curriculum development and in making STEM accessible and promote inclusivity for all?

Drawing on over a decade of personal experience of involvement in a wide range of STEM outreach and widening participation activities through international, national and local projects and initiatives such as STEM Ambassador, Women Encourage, Leading Light Project, Science in School, FameLab, Science in Residence, Aim Higher, Raising

Aspirations, Street Scientist, Café Scientific, STEM for Britain, European Researchers' Night, Science in Parliament and many more.

The presentation will draw on Dr Mudashiru's personal experiences in this domain, this talk will aim to highlight his decade of STEM Outreach, widening participation activities and lesson learned and challenges, in light of the ICTP's workshop on 'Science Dissemination for Disabled' through the use of open technologies to create and disseminate scientific know-how for all, as well as to facilitate the access for disabled people.