



IOT@School

ScienceScope led the first IoT@Schools project, Distance, was set up to enhance the use of technology in schools and incorporate data collected from scientific investigations into a Big Data platform. Eight schools were provided with internet of things (IoT) connected sensors and dataloggers that they could connect to an online portal. The equipment allowed students and teachers to gather continuous data about their environment, design investigations around it, and share their findings with other schools. In 2015-6 a similar project was carried out in Singapore, funded by the Infocomm Media Development Authority of Singapore (IMDA), which built on the concepts and educational models while further developing the technology. Most recently we have been awarded a grant to develop IOT@School to showcase it at the EXPO2020 in Dubai.

The project aims to improve students and teachers access to cutting-edge technology and connect them to the world of Big Data, thereby equipping them with the digital skills they need to engage with the modern world. However, the project is not just about providing access to technology, it seeks to engage students in technology development and in understanding how that technology can be used to address the problems and challenges they face in the real world.

The project also connects schools to a global educational community and to build partnerships between schools and business, local government and the wider public. Students can share data gathered and will increasingly be able to collaborate on investigations with students on the other side of the world. The data collected by schools can also be used in smart-city planning by businesses or government and can be used by the public to improve their understanding of their environment. This has particularly exciting potential in the area of sustainability because data can be collected on air quality and weather, which will improve people's awareness of their impact on the environment.

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