



St Patrick's Catholic Voluntary Academy Intent, Implementation and Impact Statement - Science



Intent:

At Saint Patrick's Catholic Voluntary Academy, we want every child to understand that they are a scientist. We aim to encourage inquisitive scientists who question, explore and investigate the world around them, building their knowledge and understanding. We do this through hands-on experiments. As children move through the school, all children will work scientifically in Biology, Chemistry and Physics, becoming familiar with the 5 lines of enquiry (comparative and fair testing, pattern seeking, observing over time, identifying classifying and grouping, and researching using secondary sources). Children's science capital will be developed through learning about the many careers linked to science, and about notable historical and contemporary scientists who have contributed greatly to science.

Implementation:

Science is taught at Saint Patrick's Catholic Voluntary Academy weekly, using the White Rose Education Science scheme as a starting point. Science units are taught in small steps on a two-year cycle to ensure that children are given the opportunity to revisit prior knowledge and build upon previous learning, making connections, ensuring that they meet the end of key stage expectations. Children leaving Key Stage 2 will be well equipped for secondary school with the science knowledge and skills that are required.

'Explorify' tasks are used to develop children's scientific oracy, are linked to learning, and are used to encourage children to apply their scientific knowledge and challenge their thinking. 'Twig Science Reporter' is used at the end of lessons to show how science is all around us. Key Stage 2 classes use 'Engage, Explore, Extend' activities at the beginning of new topics to assess what they already know and to identify misconceptions. Practical hands-on experiments and activities are used to deepen children's understanding of the scientific content they are learning and embed key ideas.

Impact:

Our approach to the teaching of science at Saint Patrick's Catholic Voluntary Academy will result in engaging, high quality science education which provides children with an understanding of the world around them. Children will see themselves as a scientist, no matter what age they are, with an awareness of possible future roles and careers in the scientific world. Children will be able to question ideas and reflect on knowledge. Our children will work practically and collaboratively, they will be able to articulate their understanding of scientific concepts and be able to express and reason using scientifically rich language.

As a Catholic school, understanding the connection between the scientific world and sustainability, it is important we share a knowledge and understanding of practically what we can do to support the common good in our day-to-day lives to help the environment which is belonging to and meant for all.

The impact of learning will be assessed by the subject lead with the curriculum leader through a triangulation of activities, which include: lesson observations, planning scrutinies, book looks, pupil voice, staff voice and expected subject content and progression.

Reviewed October 2023