

Intent, Implementation and Impact Statement 2024-Science

Intent Statement:

At Oak Lodge Primary School, our intent is to provide a holistic and engaging science education that fosters curiosity, critical thinking and a lifelong love for exploration and discovery. We are committed to delivering a science curriculum that aligns with the National Curriculum and the Compass Trust, while also promoting the development of essential skills, knowledge and values, that empower our student to become scientifically literate and responsible citizens. Students who can demonstrate how we look after the world, look after each other and be responsible leaders.

Implementation Statement:

Our Science curriculum is designed to be immersive, hands on, and inquiry based, ensuring that students actively participate in the learning process.

In the Foundation Stage, children are taught Science through the key area of learning set out within the EYFS Statutory Framework. Through a broad range of teacher-led, child-initiated and continuous learning opportunities, children will be taught to:

- Use their senses to investigate a range of objects and materials.
- Look closely at similarities, differences, patterns and change.
- Ask questions about why things happen and why things work.
- Develop their communication and co-operation skills.
- Talk about their findings, sometimes recording them.
- Identify and find out about features of the place they live and in the natural world around them.

In Key Stage One and Key Stage Two, we implement our intent through the following key strategies

- 1. Structured Curriculum:** We follow the National Curriculum for Science and the Compass Progression Document. This is structured into four key areas: scientific knowledge and conceptual understanding, working scientifically, the nature of science and scientific attitudes. This ensures that our students receive a comprehensive science education that is progressive and build upon prior knowledge and skills.
- 2. Practical Experiments:** We believe that science comes to life through experimentation. Our students engage in a wide range of hand-on experiments, investigations and practical activities that encourage them to ask questions, make predictions and draw conclusions.
- 3. Cross-Curricular links:** We integrate science with other subjects whenever possible, fostering connections and demonstrating the real-world relevance of scientific principles.
- 4. Outdoor Learning:** Our school grounds and local environment are used as valuable resources for outdoor learning. Students explore nature, conduct ecological studies, and learn about sustainability and the importance of preserving our planet.
- 5. Use of Technology:** We harness technology to enhance education. Interactive simulations, educational software, use of video clips and digital microscopes are integrated into our teaching methods to make science more engaging and accessible.
- 6. Enrichment Activities:** We offer a range of extracurricular activities such as visits to the Greenwich Observatory, guest speakers and science shows to expand our students' exposure to diverse scientific fields. exposure to diverse scientific fields.
- 7. Assessment and Feedback:** Ongoing assessments ensure that we monitor individual progress. Constructive feedback and targeted support help students reach their full potential.

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Impact Statement:

Our commitment to delivering an outstanding science education has a profound impact on our students, the school community and society as a whole.

1. **Student Achievement:** Our students develop strong scientific knowledge, problem solving skills and the ability to think critically.
2. **Inquisitive Minds:** We nurture inquisitiveness, curiosity and a passion for exploration. Students become active seekers of knowledge, asking questions and seeking answers both on and outside the classroom.
3. **Confident Scientists.** Students leave Year Six equipped with the confidence and skills to excel in secondary school and beyond. They pursue STEM-related careers with enthusiasm and determination.
4. **Community Engagement:** Our science homework and projects often involve the wider community, fostering a sense of scientific awareness and responsibility among our students and their families.
5. **Global Citizens:** We instil values of environmental consciousness, ethical responsibility and scientific ethics, ensuring that our students become informed and responsible global citizens and contribute positively to society.

Conclusion:

The Oak Lodge intent, implementation and impact statements reflect our unwavering commitment to providing high-quality science education that empowers students with the knowledge, skills and values needed to excel in the ever-evolving world of science and technology.

Andrew Barber

Science Lead