Our Lady's RC Primary School

Science Policy

Date Adopted	Autumn 2015
Last reviewed by Staff	Spring 2022
Person Responsible	Science Lead
Date of Next Review	Spring 2023
Version	3.1
Doc Ref	1.22

Signed: Miss Kate Postlethwaite (Person Responsible) **Date:** 26/1/20222

Signed: Hondge (Headteacher) **Date:** 26/1/2022

Signed: C. M. Massingham (Chair/Governor) **Date:** 26/1/2022

"Learning and loving together; we grow with Jesus"

Our Core Values

During Summer 2020 workshops, we revisited both our Mission Statement and Core Values. This involved everyone in discussion, reflection and prayer about the values, Mission and Aims of our Catholic school. There was a calling to all to re-commit to our purpose and to work together to understand our roles and responsibilities as part of Our Lady's

Our Mission Statement is:

"**Learning and loving together; we grow with Jesus**"

The Core Values that provide the foundation for that Mission are:

Faithful	Positive	Safe
Nurturing	Forgiving	Fair
Respectful	Honest	

NURTURE

The School's six nurturing principles sum up our practice and theory. They underpin the context, organisation and curriculum.

1. Children's learning is understood developmentally
2. The classroom offers a safe base
3. the importance of nurture for the development of wellbeing
4. Language as a vital means of communication
5. All behaviour is communication
6. The importance of transition in children's lives

Our Mission is represented by this design. As with the statement itself, the logo was developed by all stakeholders, with the children in particular providing the symbolic ideas of **growth – the tree**, **love – the hearts** and **Christ – the Cross**

1. Aims and objectives

Our Vision for Science

Science has the power to stimulate and excite pupils' curiosity about events and changes in the world around them. By linking direct, practical experiences with ideas and knowledge, science not only satisfies this curiosity, but also engages learners on many levels.

Therefore, here, at Our Lady's RC Primary School, we seek to embed various skills and attitudes including co-operation, curiosity, perseverance, open-mindedness and a respect for evidence. We also strive to encourage our pupils to develop independence in their thinking, responsibility for their learning, and sensitivity to living and non-living environments. Throughout these elements, our curriculum supports children to lead investigations and enquire about the processes involved in any physical changes observed.

Aims

- To implement the current legal requirements of the Foundation Stage (FS) and the National Curriculum (NC).

- To implement a philosophy of scientific enquiry across the school which encourages critical thinking skills in children.

- To encourage children to have the confidence to practise all types of scientific enquiry such as investigating a theory by following the guidelines of a fair and accurate test.

- To provide opportunities for children to engage in scientific activities beyond the classroom.

- To have resources available for teachers to provide innovative and memorable science lessons to encourage a child's development in science.

2. Planning

THERE WILL BE EVIDENCE IN THE LEARNING ENVIRONMENT OF:

Children's progressive learning relating to the scientific skills of: gathering research; comparative and fair testing; pattern seeking; observing over time; and identifying, classifying and grouping living and non-living objects. This coverage will be evident in their books, on the walls, in conversation and in their learning behaviour.

TEACHERS WILL ENSURE THAT:

Science lessons remain innovative and engaging in order to stimulate a child's willingness to question, explore and wonder about the world around them. Each unit will be planned to provide opportunities for children to develop their 'working scientifically' skills and engage in various scientific enquiries which enable them to investigate a concept fully.

IMPLICATIONS FOR THE WHOLE SCHOOL WILL BE:

Through our broad, balanced and challenging curriculum, we aim to support pupils' progressive development which is monitored during the academic year through work sampling, enrichment evidence and pupil voice.

3. Teaching and Learning

THERE WILL BE EVIDENCE IN THE LEARNING ENVIRONMENT OF:

Science resources used to support children's understanding of new concepts (knowledge organisers, key vocabulary, books, posters etc.)

Scientific knowledge, conceptual understanding and scientific enquiry being embedded throughout our teaching.

Cross curricular links being made in order to promote holistic development and consistent skills throughout the school.

A display or area devoted to science to promote the subject in school and enthuse the children's curiosity to the subject.

TEACHERS WILL MAKE SURE THAT:

Appropriate resources are selected to support and extend children's learning. Resources are provided on a differentiated basis to adequately support the variety of abilities. Furthermore, teachers will ensure that children are given every possible chance to conduct scientific investigations.

IMPLICATIONS FOR THE WHOLE SCHOOL WILL BE:

The Leader of Learning will ensure appropriate resources are sourced, related out of school learning opportunities are shared and links are made with other schools and institutions.

4. Assessment

THERE WILL BE EVIDENCE IN THE LEARNING ENVIRONMENT OF:

Children who are motivated to learn through differentiated learning-activities that build on their prior attainment and issue challenges that are pitched at a level that is achievable when they work hard and try their very best

TEACHERS WILL MAKE SURE THAT:

They implement assessment techniques consistent with those of other core subjects (e.g. purple challenges) and recent research (e.g. talk-based assessment) to track the level of understanding of children.

5. Safety

THERE WILL BE EVIDENCE IN THE LEARNING ENVIRONMENT OF:

The safe use of resources.

TEACHERS WILL MAKE SURE THAT:

Risks have been assessed carefully and shared with the children before carrying out any practical activities.

IMPLICATIONS FOR THE WHOLE SCHOOL:

Health and safety (safe guarding refers to issues around CP) procedures are in place and are adhered to.

6. Links with Home

THERE WILL BE EVIDENCE IN THE LEARNING ENVIRONMENT OF:

Photos, resources and follow-up work from out-of-school learning in the classroom and on online platforms to emphasise the value of these experiences.

TEACHER'S WILL MAKE SURE THAT:

Homework is used to support school and class activities. Teachers will provide activities that can promote a love of science at home and continue the children's learning experience.

IMPLICATIONS FOR THE WHOLE SCHOOL:

Ensure parents are informed about school events and relevant topics through regular newsletters, Parent Pay, notice boards and the school website.

7. Spiritual, Moral, Social and Cultural (SMSC) development

Here at Aspull Our Lady's RC Primary school, we recognise the valuable and unique opportunity science provides to further our children's SMSC development. In line with our school mission statement of *"Learning and loving together; we grow with Jesus"* and foundational core values, weekly, discrete science lessons aim to:

1. Use scientific evidence and investigations to support children's **spiritual** understanding. This is achieved by exploring our relationship with the world, looking for meaning in natural and physical phenomena, and reflecting on our experiences so that they may inform our perspective on life. In doing so, we hope that all learners develop a sense of awe and wonder at the complexities and elegance of the natural world which will drive them onwards in their search for understanding.

2. Encourage children to consider the **moral** decisions which underpin many aspects of modern day Science. Whether it's the ethics behind certain medical treatments or the environmental impact of industry, the use of scientific inventions needs to be based on evidence. Therefore, during classroom investigations, we encourage pupils to be both open minded to the views of others (generating a hypothesis) and critical of results (demanding evidence) so that knew knowledge can be used positively.

3. Recognise the inherently **social** nature of Science and provide various opportunities for children to work collaboratively, share ideas and take responsibility for their own and others' learning. In lesson time, children are also encouraged to consider both the positive and negative impact scientific discoveries can have on society such as the development of single use plastic.

4. Appreciate how Science permeates modern day **culture** and recognise that scientific advancements occur all over the world, from people of all backgrounds and cultures. Through conducting research, we challenge beliefs that progress comes largely from the UK or America and celebrate developments that take place in many different cultures. In doing so, children some to understand how scientific discoveries have shaped the, beliefs, cultures and politics of the modern world.