



SCIENCE

SELF-EVALUATION FORM

Subject Self Evaluation Form



Subject: Science

School Context

- We are a one form entry school with eleven classes. In some years we have been asked to take two classes (current Years R, 2, 3 and 5). Traditionally these have been classes of 20, but most are now closer to 30, meaning we are well above our PAN. This has a number of implications, for example we are very short on space and staff have to be flexible in which year groups they teach (a number have taught in both Key Stages)
- The proportion of pupils eligible for a free school meal is below the national average.
- The percentage of English Additional Language (EAL) pupils is well below the national average. However, since May 2022 the school has had a significant increase in EAL pupils, with a number of Ukrainian children moving into the local area.
- 82% of children started at the school in Reception.
- We have identified a number of pupils who are disadvantaged (14%). The categories we use are: Cultural, Spoken Language, Reading, Parental Engagement, Time or Fuel poor, Emotional needs or Other.
- Our school attendance is in line with the national average, however our persistent absentees is significantly higher than the national average
- We are an inclusive school. Currently 2% of the school have an EHCP which is in line with the national average. However the number of children with an EHCP or SEN support is below the national average.
- Staff retention is very high. Staff are clear on the routines and vision of the school.
- In our recent wellbeing survey of staff we came out in the top 1% of schools nationally for many of the areas.
- The school has formed strong partnership links with a number of local and national organisations. We are part of the Dunmow Excellence in Education Partnership and were one of the trial schools for the Peer Review approach of school based quality assurance.

School Vision

School Vision

WE ARE COMMITTED TO ACADEMIC EXCELLENCE
WE ARE PASSIONATE ABOUT CREATIVITY
WE NURTURE SOCIAL INTELLIGENCE
WE WORK WITH AND WITHIN OUR COMMUNITY

Rodings Primary School is committed to providing a place of academic excellence, where children's academic success is developed through a broad and deep curriculum.

We have a passion for creativity and the creative arts, and aim to provide inspirational opportunities and experiences for our children. Through strong partnerships we show our commitment to developing creative individuals.

We want our children to be happy whilst with us. We nurture social intelligence through developing a toolkit to look after our own and each other's wellbeing. We give children responsibilities, freedoms, a voice and an opportunity to lead.

Our school sits in the heart of our community, and we are committed to learning about our local area, through our curriculum. We are committed to developing meaningful links with organisations and individuals in our area.

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School Values

The phrase we use to sum up our school ethos is:

Learning together, caring for each other

We believe that children should be encouraged to care for each other as well as being able to accept high levels of responsibility. Visitors regularly comment on the children's excellent learning behaviour. After a year of consultation with children, parents, staff and governors the following Core Values were adopted in January 2016.

Respect
Enjoyment
Care
Confidence
Challenge

These Core Values are at the heart of every decision at Rodings Primary School.

Curriculum Aims

Academic Excellence, Creativity, Social Intelligence and Community are at the heart of everything we do at Rodings Primary School. We give each of these values equal weighting and through a knowledge-rich curriculum, engaging teaching, great relationships and strong partnerships, we work hard to ensure that Rodings is the best possible primary school experience for every child.

Intent

Curriculum Intent

Rodings Primary School is committed to providing a place of excellence and ambition, where children's personal development and academic success are nurtured through fun and engaging learning. The school aims to provide inspirational experiences through the curriculum so that children's curiosity and individuality grows. At Rodings, children love learning and are happy and kind. Working in partnership with the whole school community, all at Rodings feel safe and empowered to succeed.

National Curriculum

Purpose of study

A high-quality science education provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics. Science has changed our lives and is vital to the world's future prosperity, and all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science. Through building up a body of key foundational knowledge and concepts, pupils should be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. They should be encouraged

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to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes.

Aims

The national curriculum for science aims to ensure that all pupils:

- develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics
- develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them
- are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future

Implementation

Science long term plan

Each year group will teach the areas of Science identified in the school's long term plan to ensure coverage of statutory knowledge and skills. Each year group will teach all areas of Working Scientifically through planned investigative work.

Real life outcomes

Each half term topic will begin with an event to engage and motivate the children. This will also allow teachers to assess children's existing knowledge and skills in order to adapt planning and ensure appropriate levels of challenge for all children. Each half term will end with a real life outcome or project that the learning has been working towards.

Challenge and Support for all Learners

We understand that every learner develops differently and adapt our provision continuously to ensure every child receives the correct balance of support and challenge in order to achieve their very best. We recognise this fact and provide suitable learning opportunities for all children (including those who may be gifted and talented or have additional needs) by matching the challenge of the task to the ability of the child. Each child is valued, respected and challenged regardless of ability, race, gender, religion, social background, culture or disability.

Assessment

We use a triangulated approach to assess children's progress which includes end of unit quizzing, teacher assessment and working scientifically judgements. We assess children against the requirements and standards of the National Curriculum. We take into account working scientifically as well as their knowledge and understanding in each aspect of their study.

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Impact

Across the school the data shows:

4% of children are working below
18% of children are just below
66% of children are on track
11% of children are greater depth

Local Context/Local Content

Our school is part of the DEEP group and for the past few years, the Science coordinators have met regularly to organise events and receive support, resources, funding and training from the OGDEN trust.

Significant developments in the subject

Improvement in accuracy of assessment through introducing quizzing at the end of each science unit

Introduction of Pzaz as an extra planning resource

Introduction of science ambassadors club at lunchtime

Strengths

Variety of planning resources available which have lots of practical ideas including Pzaz and Hamilton trust and also resources like explorify.

Strong links through the OGDEN trust to work with other schools in the DEEP group provide opportunities to share best practice and offer children opportunities to collaborate e.g. recent Phizz factor competition.

A good range of science resources are available, especially for Physics thanks to the OGDEN trust boxes.

Science star badges are used in assembly to reward children for excellence and enthusiasm in Science.

A club is run at lunchtime with science ambassadors from Year 4 who provide science learning for all children in school on a rota basis.

Areas for development

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Is Science being taught often enough so that all curriculum objectives are covered?

Not all children may be getting the opportunity to experience enough 'working scientifically' opportunities.

Is there enough provision for SEND children?

Not all planning and practical resources are being used by all teachers - we need to provide outcomes for all science units that give children a purpose for their learning and a way to demonstrate this.

Monitoring and evaluation systems

Lesson observations and learning walks

Pupil interviews

Book looks and work scrutinies

Teacher assessment uploaded to Insight termly and quizzes are used at the end of each science unit to assess children's understanding

Triangulation in assessment of teacher assessment, quizzing and working scientifically assessment.

Cultural - Diversity

Opportunities are taken to make links to a wide range of scientists throughout history including a focus on influential women and people from a range of cultures and backgrounds.

Training

Regular training opportunities were initially provided through OGDEN trust funding which showed how to make best use of the resources for each Physics unit. This was then passed onto the rest of the teaching staff.

Enrichment

Each year, Science week is celebrated and includes, for example, a science challenge day where the children experience a range of practical science activities around a theme that provide challenge and excitement.

For the past two years, a science photography competition has been organised involving other

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schools in the DEEP group cluster.

Phizz factor science competition with other local schools

External providers e.g. planetarium and stargazing evening