

# Primary Schools Partnership January Newsletter



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## In this issue

Welcome to our January issue! This month: take part in an EEF project, **fully funded professional development for early years staff** – details below, on this page. Nicola Treby, Associate Professor and Head of Primary Core Subjects, considers the Education Endowment Foundation’s recently published guidance report, **‘Improving Primary Science’**, on page 3. Miles Berry, Professor of Computing Education, discusses **engagement in computing** on page 5. On page 7, Anthony Barlow, Programme Leader for BA Primary Education, shares feedback from our **Speaking, Listening and Moving Conference**, held in January. We hosted a nutritionist and the Education Officer from the **British Nutrition Foundation** earlier this term, find out more on page 9. We review **our staff development, training and our connections** on page 10. And we are pleased to announce that we have won a bid with Barnes Common Ltd to provide teaching materials for local teachers – we share the details of our **Blue-Green Corridors Project at Palewell Common and Fields** on page 10. Please find our latest **recruitment video** on page 12 - do share with anyone who might be interested in our Undergraduate and PGCE courses.

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## Take part in an EEF project: Fully funded professional development for early years staff

We’re recruiting schools, colleges, and early years settings to take part in trials of high-potential programmes. We’re also subsidising programmes that have previously shown to have a positive impact on student attainment, so more schools can benefit.

We’ve launched three new trials that will test the impact of three promising professional development programmes for early years educators:

- Emotion Coaching
- Talking Time
- NELI Preschool

Early years settings across England - including Private, Voluntary and Independent (PVI) settings, maintained nursery schools and nursery classes in schools - are invited to take part.

Search your setting to find out which trials you could join, and which subsidised programmes are on offer where you are [here](#).

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## Improving Primary Science: Guidance report

By Nicola Treby, Associate Professor and Head of Primary Core Subjects

The Education Endowment Foundation has recently published a guidance report titled '[Improving Primary Science](#)'. The report draws from high-quality evidence to suggest 6 practical recommendations aimed at improving primary science in a meaningful way. The recommendations consider both academic and attitudinal outcomes.

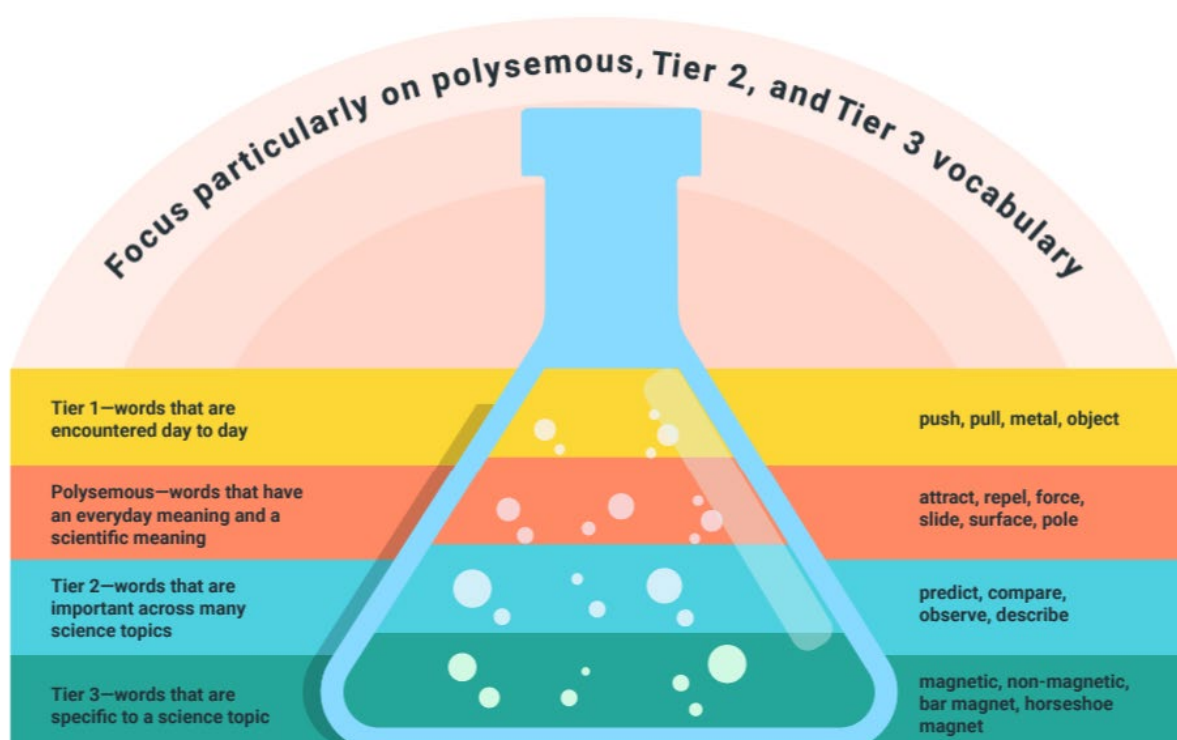
The 6 recommendations are as follows:

- 1) Develop pupils' science vocabulary
- 2) Encourage pupils to explain their thinking, whether verbally or in written form.
- 3) Guide pupils to work scientifically.
- 4) Relate new learning to relevant real-world contexts.
- 5) Use assessment to support learning and responsive teaching.
- 6) Strengthen science teaching through effective professional development, as part of an implementation process.

The report is comprehensive and worth a read in full; however, for this article's purposes, I will focus on the discussion on the first two recommendations:

### 1) Develop pupils' science vocabulary

To do this the EEF recommends that teachers explicitly identify scientific vocabulary and explicitly teach new words and their meanings, creating opportunities for repeated engagement and use over time. As well as identifying and using key vocabulary teachers are encouraged to focus particularly on polysemous vocabulary (words that have everyday meaning and scientific meaning), tier 2 vocabulary (words that are important across many science topics) and tier 3 vocabulary (words that are specific to a science topic. An example from the report can be seen below:



It is important to note that key definitions that are used may be related to Tier 1 vocabulary; however, it is vital that children are explicitly taught polysemous, tier 2 and tier 3 vocabulary to deepen understanding and provide the necessary vocabulary to express their scientific thoughts and ideas. The report also highlights the importance of modelling the accurate use of key vocabular with a context familiar to children. And the value of revisiting key science vocabulary across all literacy activities.

**Actionable change:** Could you look at each science topic and break down the key vocabulary in the way shown in the diagram above?

## 2) Encourage pupils to explain their thinking, whether verbally or in written form.

Asking pupils to explain their thinking provides an opportunity to organise thoughts. This includes valuable processes such as checking understanding, refining understanding, practice using polysemous, tier 2 and tier 3 key vocabulary. The guidance draws from multiple forms of evidence and suggest 3 steps to consider when asking children to explain their thinking:

A) Create a collaborative learning environment – ensure that groups are small and well structured.

*Talk Behaviour:* Recap any ‘ground rules for talk’ that are routinely incorporated within the lessons, e.g. turn taking.

*Expectation Setting:* Can you model how to disagree in a constructive and respectful manner?

*Task Design:* Ensure that the task is scaffolded appropriately. If there is too much scaffolding the task is unlikely to lead to learning. If there is too little scaffolding the pupils may become frustrated and confused.

B) Capitalise on the power of dialogue – including teacher to peer talk and peer to peer talk

Plan key questions and discuss points in advance – Use open ended questions that probe understanding e.g. What makes you think that?

Use strategic follow-up questions to guide dialogue – Model how to build conversations that can deepen understanding for all e.g. Who can add to the point that has just been made?

Balance teacher and pupil voice – Ensure that you provide pupils with sufficient thinking time to process what they want to say before stepping in as the teacher with another prompt. I always remind trainees that stress and anxiety can hinder processing. Very high levels of stress can trigger a ‘fight, flight, freeze’ response. Trainees are also encouraged to consider whether the task has an appropriate level of challenge and support but takes place within a low stress environment.

C) Cultivate reasoning and justification – encourage children to be curious and cultivate reasoning. A strategy that can be useful to cultivate understanding is suggested below:

Explain – pupils are asked to work in pairs or small groups to explain their thinking

Discuss – pupils then engage in large group or whole class discussion to clarify understanding

Re-explain – pupils then re-explain their understanding verbally or in the written form.

If you have any resources that exemplify best practices concerning points 1 and 2 above, please email them to [nicola.treby@roehampton.ac.uk](mailto:nicola.treby@roehampton.ac.uk) and we will show them to our trainees to help them to be as ‘school ready’ as possible.

## What else is happening in relation to Primary Science?

General Science Initiatives that I'd encourage you to look at are shown below. Even if you are not able to join in events, you may well find some very useful resources that you can incorporate into your science planning.

Art competition: <https://explorify.uk/teacher-support/helpful-reads/explorify-art-competition>

Mars Day: Preparation to launch:

<https://www.eventbrite.co.uk/e/mars-day-24-tickets-719789197867?aff=oddtcreator>

I'm a scientist get me out of here: <https://imascientist.org.uk/>

International Day of Women and Girls in Science - 11<sup>th</sup> February:

<https://www.stem.org.uk/resources/collection/507494/international-day-women-and-girls-science-11th-february>

British Science Week, 8<sup>th</sup> - 17<sup>th</sup> March: <https://www.britishtscienceweek.org/activity-packs/>

Institute of Engineering and Technology: <https://education.theiet.org/primary/>

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## Engagement in Computing

By Miles Berry, Professor of Computing Education

This article was first published on <https://www.ictforeducation.co.uk/sapientia/>.

Some teachers are addressing this well, but by and large there does seem to be an engagement problem in too many computing lessons. This isn't new. Back in the days when Ofsted was HMI (1989), the inspectorate reported that many experienced computing as 'dry, dull and unexciting'. Before the switch from ICT to Computing ten years ago, Michael Gove complained of "Children bored out of their minds being taught how to use Word and Excel by bored teachers". Whilst there's much less Excel taught these days, I think the problem of boredom remains. Data from the Wellcome Trust suggests that pupils' interest in computing drops off during secondary school - 75% find it interesting in Year 7, but only 38% still do in Year 11. This is despite the enthusiasm that pupils show for using digital technology outside of school - from social media through gaming, to creating music, photography and video.

It's worth improving this. Firstly, so that young people have a better time of it at school, making computing lessons more enjoyable. Pupils who enjoy their computing lessons are going to learn more, are more likely to carry on studying this for qualifications, and are less likely to present challenging behaviour, making these lessons more enjoyable for teachers too.

What can be done to make computing lessons more engaging? It's worth exploring both what we teach and how we teach it.

### Curriculum

The national curriculum programmes of study provide a minimum entitlement for all, but they can be interpreted very broadly and impose no limits on what can be taught. Over the years since the curriculum was introduced, and partly as a result of the narrow focus on theoretical aspects of computer science at GCSE, there has been disproportionate time spent on things like system architecture, binary arithmetic, Boolean logic and network protocols even at Key Stage 3. Wouldn't it be better to use the all too limited subject time to give pupils a broader experience of the subject? Yes, this should include programming –

as Simon Peyton Jones put it, “Without programming, computer science would be a dry, theoretical husk of a subject”. It can also include some introductory data science, some creative work across a wide range of digital media (including music, video, animation and games), as well as the sort of critical digital literacy which would equip pupils to make sense of, and contribute positively to, an increasingly digital world. Remember that GCSE and A Level specifications are about what gets tested, not what can or should be taught.

Beyond this, it’s worth thinking about how the content of the curriculum can be more relevant. Look for ways to make connections with the latest developments in technology, making use of the latest tools; helping pupils develop their knowledge of and skills with emerging areas such as generative AI, virtual reality and robotics; and addressing issues such as bias in training data, the harms of social media and cyber threats. Alongside this, think about how the curriculum can better reflect pupils’ own interests and experiences, and pay more attention to their own identities and cultures. Look for ways to make connections with the real world, through the use of real data, real tools and real problems.

## Pedagogy

What we know about effective teaching applies to computing as to other subjects, so fundamental ideas like linking new knowledge to existing knowledge, breaking content down into manageable chunks, modelling through worked examples, reducing extraneous cognitive load, and providing opportunities for pupils to practise and apply their learning are all important. Mastering new knowledge and skills is itself engaging.

Remember that this is a creative subject, having at least as much in common with the pedagogies of art, music and design and technology as it does with those of mathematics or science. Seymour Papert’s great insight was that pupils learn best when they are engaged in making something: that they make something in their head through making something in the world. Creative work motivates and provides context and application of learning. Computing is about studying in order to build. Make time for meaningful, extended projects for pupils, in which they’re actively engaged in making artefacts as well as connections, where they have at least some choice over what they make and the tools they use, and where they can share their work with others.

Recognise the importance of collaboration in computing. Beyond school, programming and other IT projects demand teamwork and careful coordination, and some experience of the problems and opportunities that this brings can prepare pupils for higher education and employment, as well as making the subject more engaging. Why not let pupils work together on creative projects, exam questions and challenging problems? Pair programming, a development method in which two coders work together sharing the screen, keyboard and mouse, with distinct ‘driver’ and ‘navigator’ roles, is an effective approach in real-world software engineering, and helps in the classroom too. There’s nothing in the current practical programming requirements for OCR which requires the work to be done individually.

There’s a difference between how novices and experts learn, and it’s safe to acknowledge that for most curriculum content most pupils are novices. Thus they’re likely to need more support, more scaffolding, more worked examples, more modelling, more practice and more feedback than an expert would. However, some pupils already have, or quickly develop, a degree of expertise in the subject, and their ongoing engagement comes through adapting teaching approaches to take this into account. Encourage independent learning: there are excellent online resources that a well-motivated pupil can access for themselves, set challenging problems, and provide opportunities for community participation and leadership.

I don’t think engagement is a binary thing - there are degrees to this. For pupils to learn in class, there needs to be attention as a minimum, but beyond this, work to see pupils increasingly committed to their tasks and to the subject. Help them become persistent learners and technologists, reluctant to give up in the face of problems. Adapt the curriculum, and your teaching, so that they see meaning and purpose in their learning.

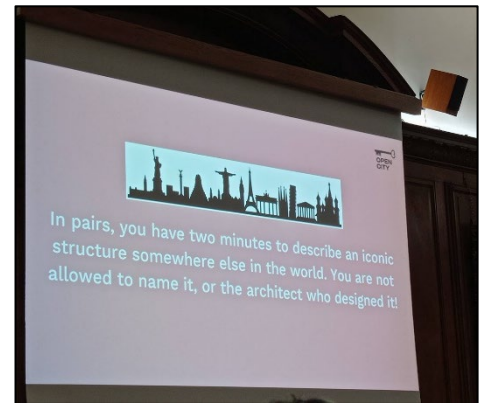
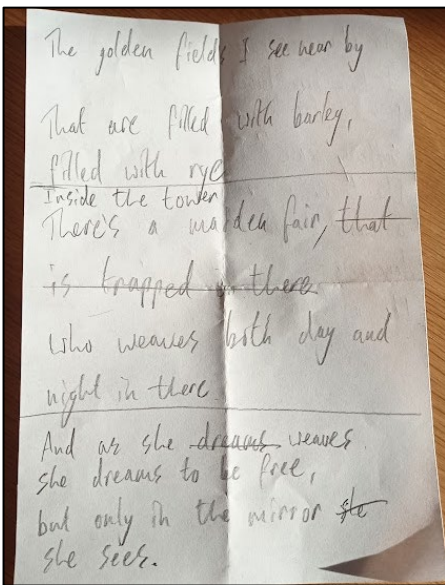


## Speaking, Listening and Moving Conference 2024

Our thanks to all speakers who supported our conference which covered all the senses and so many ideas from drama techniques, the 'Superpower of Looking' and the challenges of living and play spaces in London's built environment. Please see below for some highlights from the day.

*Below left:* Drama based on the poem The Lady of Shallott, led by Roehampton's Professor Carrie Winstanley and Science Author Jack Challoner

<https://jackchalloner.me/>



*Below:* We created a group performance in just 50 minutes – all possible with enthusiasm and the right stimulus and direction!



Practising the 'Superpower of Looking' with Art UK's Katie Leonard. Find out more here:

<https://artuk.org/learn/the-superpower-of-looking>



### Some student feedback from the day:

"Very engaging and interactive".

"I found today really informative but particularly enjoyed the story telling session as it links nicely to our CC3 English module".

"Drama workshops can be fun with little resources. City is mine too was an exceptional eye opener to how SEND children can access the city and what is in place for them."

"Story telling at the end of the day- really interactive and engaging and a good way to end the day"

"PE was the most time effective session. It was great hearing from the visitor and new PE lecturer. Found this extremely useful and was engaging, looking forward to PE this term".

"Very inspiring day. I learnt a lot from all the guests."

**By Anthony Barlow, Programme Leader, BA Primary Education QTS**

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## Upcoming ECT roles at your school

If you wish to advertise ECT jobs with us, then please send adverts (PDF or Word files) to [baprimary@roehampton.ac.uk](mailto:baprimary@roehampton.ac.uk) and [pgprimary@roehampton.ac.uk](mailto:pgprimary@roehampton.ac.uk), and we will share these with our current students and graduates from last academic year.







# British Nutrition Foundation

Earlier in the first week of this term, we hosted a nutritionist and the Education Officer from the British Nutrition Foundation. We thought deeply about types of food, an EatWell guide and the challenges facing the choice we all make and children are faced with. Do sign up to their email newsletter to hear more: <https://www.nutrition.org.uk/>



Healthy and sustainable diets



Starchy foods, sugar and fibre



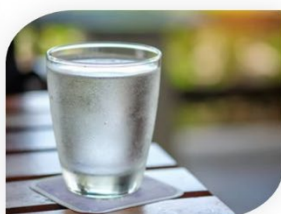
Protein



Fat



Vitamins and minerals



Hydration



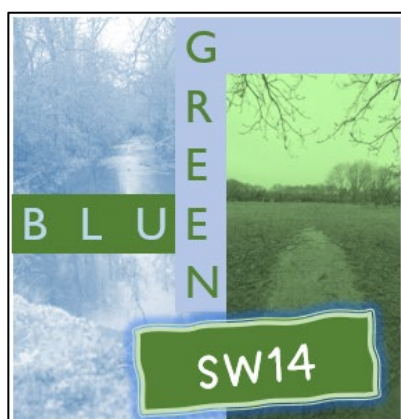
Nutrient requirements

## Staff development, training and reviewing our connections

Reviewing our connections and supporters on the programme, we had a recent whole university staff training event where we learned about AI in education and heard presentations from colleagues. As part of a talk on Partnerships with local businesses, Programme Leader, Anthony Barlow spoke about the wider connections we have with a wide range of businesses and educational charities and organisations. We were proud of the support all these offer our trainees, broadening their perspective on the opportunities that they can bring into their careers and the pupils they teach. If you want to know more about any of these contacts or have 'knowledge exchange' partners yourself, do please get in touch. [anthony.barlow@roehampton.ac.uk](mailto:anthony.barlow@roehampton.ac.uk)



## Blue-Green Corridors Project at Palewell Common and Fields, SW14



We are pleased to announce that we have won a bid with Barnes Common Ltd to provide teaching materials for local teachers. This toolkit will provide a suite of video material and fieldwork teaching ideas to support any location, but especially any along the Beverly Brook corridor that runs from New Malden, through Richmond Park and via Palewell Common and Barnes Common to the Thames.

These materials will support learners aged 5-11 and will have a focus on nature connection, storytelling and local area fieldwork. They will include

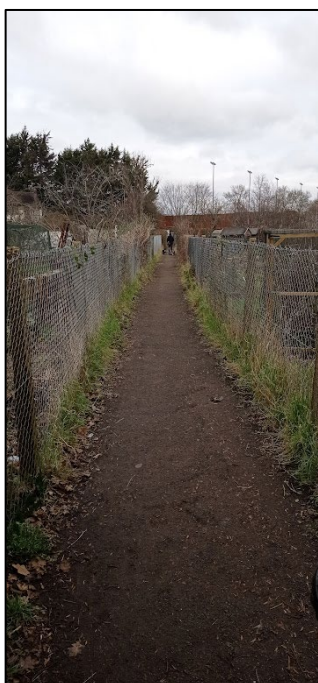


filmed videos of in situ storytelling, support for teaching about rivers and floodplains and river restoration, as well as meaningful connections with other 'blue-green' spaces nearby such as Richmond Park, Barnes Common and Wimbledon and Putney Heath.



We are holding some immersive CPD days on Monday 12 and 13<sup>th</sup> February 2024 if anyone would like to be involved and learn alongside us and the student teachers. We will also have a filming day on Monday 19<sup>th</sup> February. All materials will be available free via an open website.

If you would like to know more, do contact [anthony.barlow@roehampton.ac.uk](mailto:anthony.barlow@roehampton.ac.uk) or Paddy at [education@barnescommon.org.uk](mailto:education@barnescommon.org.uk). You can see updates here: <https://twitter.com/BlueGreenSW14>.



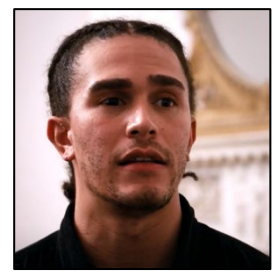
*Some views of the variety of landscapes around Palewell Common and Fields and Beverley Brook, SW14. These offer rich opportunities for immersive and creative blue-green fieldwork experiences.*

## Recruitment: Our latest short video

*Do share with anyone who might be interested in our Undergraduate and PGCE courses*

WATCH HERE: <https://www.youtube.com/watch?v=4RwNeCxQZxA>

Conversations with  
our teacher training students



"One trainee summed this up by likening the course to a marathon, with university staff being 'the crowd cheering trainees on'."  
(Ofsted, 2023)

"Trainees' well-being is central to leaders' work."  
(Ofsted, 2023)



## Our Primary Subject Leads



**Subject:** Geography

**Subject Lead Name:** Anthony Barlow

**Email:** [anthony.barlow@roehampton.ac.uk](mailto:anthony.barlow@roehampton.ac.uk)

**Telephone:** 0208 392 3386

**Key subject/research interests:** Pupil understanding of their everyday geography and the locality.

**Subject:** Computing

**Subject Lead Name:** Lynda Chinaka

**Email:** [Lynda.chinaka@roehampton.ac.uk](mailto:Lynda.chinaka@roehampton.ac.uk)

**Telephone:**

**Key subject/research interests:** Computing Education in Primary settings. Building confidence for the teaching of all elements of the computing curriculum: Computer Science, Information Technology and Digital Literacy. Ensuring practice and pedagogy that intersects with the identities and experiences of all learners. Computing and creativity for everyone!



**Subject:** English (BA)

**Subject Lead Name:** Anna Harrison

**Email:** [anna.harrison@roehampton.ac.uk](mailto:anna.harrison@roehampton.ac.uk)

**Telephone:** 020 8392 3017

**Key subject/research interests:** Digital Literacies, Print and Digital Picturebooks, Reading, Siblings as Readers, Children's Literature, The Classics, Beatrix Potter.

**Professional Links:** Open University Reading for Pleasure, UKLA, IBBY (International Board of Books for Young People).

**Subject:** English (PG/SD)

**Subject Lead Name:** Steph Laird

**Email:** [s.laird@roehampton.ac.uk](mailto:s.laird@roehampton.ac.uk)

**Telephone:** 020 8392 3076

**Key subject/research interests:** The teaching of writing, children's responses to picture books, how children read film and the use of film as a stimulus for writing.

**Professional Links:** Member of the United Kingdom Literacy Association (UKLA)



**Subject:** History

**Subject Lead Name:** Susie Townsend

**Email:** [susan.townsend@roehampton.ac.uk](mailto:susan.townsend@roehampton.ac.uk)

**Telephone:** 020 8392 3369

**Key subject / research interest:** Relativity and History, experiential learning, historic fiction and diversity.

**Professional links:** Regular contributor to Primary History journal and to Historical Association conferences.

**Subject:** Maths

**Subject Lead Name:** Lorraine Hartley

**Email:** [lorraine.hartley@roehampton.ac.uk](mailto:lorraine.hartley@roehampton.ac.uk)

**Telephone:** 020 8392 3365

**Key subject/research interests:** Planning and teaching and assessing in primary mathematics; fractions across the primary age range.

**Professional Links:** ATM/MA; NCETM and consultancy in schools.





**Subject:** Art and Design

**Subject Lead Name:** Susan Ogier

**Email:** [s.ogier@roehampton.ac.uk](mailto:s.ogier@roehampton.ac.uk)

**Telephone:** 0208 392 3086

**Key subject/research interests:** Primary Art and Design education; holistic education; broad and balanced curriculum.

**Professional Links:** NSEAD; NAPTEC; NASBTT (Associate Consultant for Primary Art and Design)

**Subject:** Design and Technology

**Subject Lead Name:** Sue Miles-Pearson

**Email:** [s.miles-pearson@roehampton.ac.uk](mailto:s.miles-pearson@roehampton.ac.uk)

**Telephone:** 0208 392 5781

**Key subject/research interests:** CAD CAM (Computer Aided Design and Computer Aided Manufacture); Food technology that is being taught in the English primary schools; I am also interested in pupils in the Early years learning the key design and technology skills that they will require for Key Stage one and beyond.



**Subject:** Physical Education

**Subject Lead Name:** Sarah Robinson

**Email:** [sarah.robinson@roehampton.ac.uk](mailto:sarah.robinson@roehampton.ac.uk)

**Telephone:** 0208 392 3398

**Key subject/research interests:** Physical literacy; creativity in PE; Physical Education and the development of the whole child; active learning for the classroom; and the value of teaching through a variety of activities. Outside of primary education I am also an athletics coach.

**Subject:** Science

**Subject Lead Name:** Dr Nicola Treby

**Email:** [nicola.treby@roehampton.ac.uk](mailto:nicola.treby@roehampton.ac.uk)

**Telephone:** 020 8392 3263

**Key subject/research interests:** Varied interests relating to primary science, including science enquiry and outdoor learning. I also have a research interest in pastoral care within the school context.



**Subject:** Religious Education

**Subject Lead Name:** Lesley Prior

**Email:** [lesley.prior@roehampton.ac.uk](mailto:lesley.prior@roehampton.ac.uk)

**Telephone:** 0208 392 8163

**Key subject/research interests:** The role of SACREs in RE and the interface between religion and worldviews and the life of schools.

**Professional Links:** Among my many links with various professional RE organisations, I am Chair of the European Forum of Teachers of RE and I am a former Chair and current Executive Member of the National Association of SACREs.

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**Partnership Materials Page:**

<https://external.moodle.roehampton.ac.uk/enrol/index.php?id=108>

(click "Log in as guest" & enter the password **RoehamptonTrainee**)

**University of Roehampton Primary Partnership webpage:**

<https://www.roehampton.ac.uk/education/primary-school-partnerships/>

**School Partnerships Team**

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**Head of Partnerships / Mentor Training Lead:** Natalie Rankin

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**BA (Undergraduate) Programme Convener Primary Education:** Anthony Barlow

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**PGCE (Postgraduate) Programme Convener Primary Education:** Steph Laird

email: [s.laird@roehampton.ac.uk](mailto:s.laird@roehampton.ac.uk)