

A Governor's Perspective on the teaching, learning and assessment of Primary Science & Engineering

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Overview

- A mastery based curriculum focusing on working scientifically
- Double Year group topics
- No Physics specified for infants/Key Stage 1
- One set of standards for Key Stage 1 and one for Key Stage 2 (working towards, working at, working beyond)
- Removal of levels
- Encouragement of observation over time, classifying and identifying, pattern seeking, fair tests, research and modelling
- Emphasis on child-led learning and focused teacher questioning



Problems

Primary Science lacks status in and isn't given its core subject value.

Teaching science isn't given equal priority as other core subjects. There is limited time and funding allocated to it.

The City operates at two extremes – high science innovation versus poor quality science learning

Implications

Children often receive less than the advised hours for science.

Teachers fail to engage in professional development and rarely share practice. There is an uncoordinated and pocketed provision of support.

A regional economy that will fail to generate University STEM recruits or the desired ambitious well-trained STEM workforce.

Needs

A high profile, endorsed stimulus that offers a range of activities focused on primary science & engineering

More CPD for teachers which is cascaded in a way that teachers are able to share practice, learn and develop collaboratively.

A City-wide approach that is underpinned by innovation in the teaching and learning of primary science

Payoffs

Children will potentially do more science learning, which are creative and practical in nature.

Impact will not only be on children but their families, leading to increased interest in STEM careers and the University

A model that can be transferred and duplicated in other key cities in the UK, and potentially beyond (e.g. future ESOF/ECoS hosts)



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raise awareness of science
& engineering in our City

continue to inspire
engagement and
commitment to learning

add value to the status of
primary science &
engineering

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By eliciting the involvement of teachers, community groups, WP & Outreach, charities, regional business partners, Cultural Assets/Organisations, STEM organisations, Learned Societies, etc.