

QUESTIONS FOR GOVERNORS – A FRAMEWORK TO FACILITATE DISCUSSIONS BETWEEN GOVERNORS AND SCHOOL LEADERS

TEACHING

What is the status of engineering within your curriculum offer?

What is the quality of the teaching and learning of engineering in your primary school?

T1. How confident are your teachers in knowing and understanding what engineering is, the range of disciplines and what's distinctive about how engineers think and work?

T2. How does engineering education happen in your primary school? Where in the curriculum? How much time? By whom?

T3. How many primary teachers have prior experience or qualifications relevant to the teaching of engineering in primary school?

T4. How confident are your teachers in designing and delivering lessons that would involve the pupils in engineering, practical projects or activities at different age groups?

T5. What opportunities are there for teachers and teaching assistants to develop professionally and how are they encouraged to pursue them?

T6. How much time is allocated to Teacher CPD within the school timetable?

T7: What opportunities are there for teachers and subject leaders to gain insight into where to source and find high quality engineering education resources/materials fit for primary pupils?

T8: How often do teachers across S, D&T, M and Computing come together to plan and review engineering educational opportunities/challenges/projects/activities/events?

PUPILS & PROGRESSION

How do your school's primary pupils progress in their learning of engineering?

PP1. How confident are your pupils in knowing and understanding what engineering is, the range of disciplines and what's distinctive about how engineers think and work?

PP2. Do your pupils make progress in their understanding of engineering across the primary years? Is there a framework for pupil progression in this area?

PP3. Is the quality of learning engineering linked to achievement in other subjects?

PP4. How is feedback given to pupils when involved in an engineering activity, event etc.?
(Is it 'marked', assessed?)

PP5. Is engineering education used as a means to achieve other goals in the curriculum, e.g. EDI, intervention for maths attainment, global sustainability, citizenship, careers education, family engagement, behaviour & attendance, whole school ethos, etc.?

CHOICES

Do all pupils have access to learning science and technology in the primary classroom?

- C1. What opportunities are there for pupils to find out what engineers do or to meet engineers?
- C2. Do factors such as socio-economic background or gender affect how pupils perceive or engage with science in the primary classroom?
- C3. To what extent do pupils' experiences in primary school influence their engagement at secondary level?
- C4. Do you promote STEM careers in your school, and if so, how?
- C5. How flexible is the primary curriculum to be able to include engineering contextualisation?

FACILITIES

Overarching question:

Does the school recognise and provide the appropriate facilities and budget to teach STEM successfully?

- F1: Does your school have a comparable budget to other subjects?
- F2: Are there appropriate resources (consumables) and 'tools' to meet the needs of the curriculum/pupils?
- F3: Does your school have an accessible and inclusive space/area/facility to "make" and "experience" engineering things?
- F4: Does your school have full time teaching assistants or LSA's who have relevant STEM experience to be able to support STEM learning?

ENRICHMENT

Overarching question:

What enrichment opportunities extend curriculum entitlement for pupils in your school?

- E1. What science and maths extra-curricular opportunities are there for students to engage with in and out of school?
- E2. How do you measure the quality and impact on the extra-curricular activities in and out of school?
- E3. How are you embedding your Schools' Sustainability Strategy within your enrichment activities?
- E4. How do you ensure all enrichment activities are diverse, inclusive and available to all students?
- E5. How are you including CEIAG within your Enrichment activities?
- E6. How do you select your enrichment activities?
- E7. Do you engage with STEM Ambassadors? How do you facilitate your students to meet Engineers?

We welcome feedback on the questions above and invite Governors to get in touch with us if you wish to let us know how you've used them, and the influence they have had.

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