



Dear Headteacher,

Developing and Managing STEM in a Primary School

STEM is more than just an acronym it is an approach to teaching and learning. Originally STEM was designed to encourage students to pursue a career in the areas of Science, Technology, Engineering and Mathematics. However, STEM has evolved into a unique approach to teaching and learning that fosters creativity and innovative thinking and promotes contextualised thinking using real world scenarios. Through a STEM approach children learn strategies for solving problems, designing projects and communicating ideas.

'Developing and Managing STEM in a Primary School' is a new national qualification which we have written and has been endorsed by Ofqual. It is a level 3 certificate through Gateway Qualifications and is the first of its kind for educational professionals with regard to STEM and is causing considerable national interest. The qualification is an essential framework to help teachers and school based staff support the growing need for children and young people to engage with science, technology, engineering and maths. Ensuring that pupils have the skills and knowledge to meet the demands of employers and changes in the workplace. It is universally accepted that this must start early and hence why we have approached this from the primary age range upwards unlike many national initiatives.

We have already been corresponding with schools through our initiatives in Robotics and the Institute of Engineering's Formula Goblin electric go-karts programmes. We have recently won a grant for the latter and as a result Norfolk will be included in the national Formula Goblin series races, racing the profile of our county further. We are also creating a specialist STEM facility at The Kinesis Centre based at Carrow Road, home to Norwich City Football Club.

STEM nationally as an approach to teaching and learning is gathering momentum, *Developing and Manging STEM in a Primary School* is the first national qualification for learners to aspire to or for recruiters to seek from potential employees. STEM is totally embedded in many other countries said to be ahead of us as a nation and accepted as an approach to learning. The UK is often looking to other countries for their dynamic approach, or just their relative success in education league tables for inspiration and approaches which work. STEM as an approach has created much interest and it is gathering pace in the UK.

This qualification equips teachers to use the STEM approach to learning and to develop and manage resources to support them in this transition. Engineering and technology move at a great pace and developments in this field have moved on but have not necessarily been met by training providers and colleges. This leaves teachers feeling less confident to meet the demands of a modern fast moving skills and employment market. Therefore this qualification will provide the staff development to lead to school improvement and enhanced competence within the workforce engaged in education. By addressing this early (i.e. in primary phase) pupils will be better placed to make informed choices over possible career pathways, vocational routes or apprenticeships when they can start to access specialized provision through UTC's and other such learning pathways. STEM learning and projects can also help with the transition to secondary school.





Our objective, working in partnership with many other agencies, is to use this qualification to bring about a systemic change in how we approach teaching and learning in primary schools relating to STEM. This will help to raise standards and confidence and competence of teaching staff in schools. Building this resilience and capacity is essential to support this change.

Strong links with initial teacher education are established here in Norfolk and national businesses and industry will be inputting into the qualification delivery and development.

You are invited to book a place on this course (10 days spread throughout 2017) which will allow the candidates to fully engage with STEM learning and how to develop and manage STEM within your school.

Dates and booking arrangements are attached to the flyer. Please respond by **January 10th 2017** as there are only a limited number of places available. To book a place on the course please visit:

http://s4s.norfolk.gov.uk/Event/40567

I look forward to receiving your booking and supporting you and your school in this exciting educational initiative.

Kind Regards,

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