



A Framework for Sustainable STEM Innovation



The process of adding value to pupils' learning experiences in ways that are embedded within a school.

Sustainable STEM Innovation

Features	Characteristics	Outcomes
Direction	Leadership and strategic vision	<p>A vision and clear direction for STEM education is clearly articulated in the school development plan</p> <p>STEM leaders/teachers can articulate the rationale for adopting new methods and ways of addressing STEM</p> <p>STEM leaders keep themselves up to date with relevant professional development regarding STEM education/economic trends and discontinuities and they communicate this with colleagues</p>
Environment	<p>Values</p> <p>Infrastructure</p> <p>Collaboration</p>	<p>Common goals relating to STEM education are communicated and are understood by the whole school community</p> <p>Formal and informal internal networks are established to recognise innovation and enhance pupils' learning and development in relation to their STEM education</p> <p>External engagement with industry provides positive role models to directly support the STEM curriculum</p> <p>Pupils have opportunities to consider the importance of STEM in their lives through the STEM subjects and a range of curricular contexts, such as English, Citizenship, Home Economics, Personal Development and Employability/Careers Education</p>
Delivery	<p>Curriculum Planning</p> <p>Learning and Teaching</p> <p>External support</p>	<p>Planning the STEM curriculum for ALL pupils is led by STEM education research findings</p> <p>STEM learning and teaching focuses on current economic, social and environmental priorities that explicitly outlines the relevance to pupils' lives and/or future careers</p> <p>Pupils engage in practical and investigative learning</p> <p>External engagement brings greater meaning, insight and relevance to the STEM related curriculum and in turn to pupils' learning</p>
Added Value	<p>Learner's voice</p> <p>Capacity Building</p>	<p>Pupils are motivated to consider the range of opportunities their learning offers in terms of their future lives and careers</p> <p>Pupils' choices as to whether to continue to study STEM related Areas of Learning are based on an understanding of relevance and because they are motivated to do so</p> <p>What pupils say in STEM research has an impact on future planning for the STEM curriculum</p> <p>Successful innovation is embraced and embedded by the school community</p>