# **UK STEM policies and links to the Peep Learning Together Programme: Summary**

STEM: Science, Technology, Engineering and Maths

### Introduction

'We are at one of the most important, exciting and challenging times in the history of global enterprise. Powered by new technologies, the way we live our lives as workers, citizens and consumers is being transformed across the world...it is not enough just to look at the economy we have. We must make preparations for the economy we need to become.' Industrial Strategy: Building a Britain Fit For The Future

Across the world STEM is recognised as increasingly important to economic growth. UK governments are acutely aware of the need to equip their people, places and businesses to be able to respond, resulting in a range of government policy documents published in recent years.

The <u>Peep Learning Together Programme</u> supports all elements of the STEM policy themes. It is an established, evidence-based, early intervention/prevention, adult learning programme which aims to improve the learning and development of babies and young children by supporting their parents and carers.

The Programmes aims to improve children's:

- personal, social and emotional development
- communication and language
- early literacy
- early numeracy
- health and physical development.

Further detail can be found in the full UK STEM Policies and links to the Learning Together Programme Report.

Across all policies, four key themes emerge which link to aspects of the Learning Together Programme:

# **Excellence and Inspiration**

Focus must be on: the delivery of an exciting STEM curriculum, with the provision of stimulating experiences and supporting resources; the importance of building 'STEM Capital' (the interest, knowledge, confidence and appreciation of the opportunities available within STEM) amongst children, young people, parents/ carers, families and communities; a particular emphasis on Mathematics; and the importance of a highly skilled educational workforce.

The Peep Learning Together Programme equips early years professionals with the skills, knowledge and confidence to support families to improve learning at home. Practitioners gain a Peep City & Guilds unit accreditation in working with parents and children together and have access to an inspiring, robust curriculum and resources.

The Programme content includes a Numeracy strand focussing on all aspects of mathematics, underpinning children's key STEM learning, whilst also developing the knowledge, skills, positive attitudes and confidence of their parents.

Early Literacy and Health and Physical Development strands further support direct STEM learning, while Communication and Language, and Personal, Social and Emotional Development strands support key STEM skills and dispositions such as communication, collaboration, enquiry, motivation, resilience, tenacity, self-confidence, self-esteem and emotional self-regulation.



### **Equity**

Particular importance is placed on the equity gap in relation to STEM, highlighting the need to address equality of opportunity for everyone including. This includes the early years period and the role of parents/ carers in recognising the potential of STEM activity and study, and how they influence children and young people's career choices.

The Peep Learning Together Programme is a flexible, accessible, affordable strengths-based intervention. Based on the ORIM Framework it values and builds on existing skills, capabilities and potential, helping all families to recognise the relevance and importance of what they do with their children. Supported by a strong evidence base, it aims to achieve equity in educational outcomes and raise the attainment of all children, addressing the poverty-related attainment gap.

# **Lifelong Learning**

From recognising the importance of promoting STEM skills and knowledge in the early years, with children and their families, through to postgraduate study and importantly beyond into the workplace in the form of training, re-training and re-skilling for adults, opportunities for lifelong learning are identified as key to STEM development and sustainability.

Research supporting STEM learning and teaching in the early years, with clear links to the relevant skills, knowledge and learning dispositions is provided in The Roots of STEM (Center for Childhood Creativity 2018)

The Peep Learning Together Programme offers an exciting range of topics, activities, and resources for families of under-fives to share, highlighting the importance of a stimulating Home Learning Environment. It aims to build the skills, knowledge and confidence of families, recognising the role that parents can play as key influencers of children's attitudes, choices, interests and skills they develop. It also supports parents and carers to identify their own strengths, the relevance of their own prior experiences and attitudes and how these can influence their children's learning and development.

Nationally-recognised adult learning units are embedded within the Programme based on what parents/carers already do to support their child's development, and how they have put into practice the knowledge gained while taking part in the Programme. Further education pathways to FE colleges are in place, supporting adults to re-engage with learning for themselves.

#### Connection

All strategies acknowledge the importance of partnership working at national, regional and local levels; using the skills of professionals from a range of organisations, resources available within communities and sharing good practice - all with a strong focus on engaging with families.

The Peep Learning Together Programme promotes partnership working and has the potential for multi-agency delivery by professionals who are already engaged with families, in their local environments. It is designed to be used flexibly by Peep-trained practitioners, to meet the needs and interests of families. It can be used in the home, in universal or targeted groups, in drop-in sessions including stay and play or child <u>health clinics</u>, in a <u>school or nursery</u> – wherever families spend time.



# Links to relevant strategies and supporting information

The Northern Ireland Strategy - Success through STEM ( https://www.economyni.gov.uk/sites/default/files/publications/del/STEM%20Strategy-Success%20through%20STEM.pdf)

The Welsh Strategy: STEM Education and training - A delivery plan for Wales

(https://gov.wales/docs/dcells/publications/160311-stem-delivery-plan-en-v2.pdf)

**Successful Futures** (Curriculum and Assessment Review 2015)

(http://learning.gov.wales/news/sitenews/successful-futures/?lang=en)

#### **Education Begins at Home Campaign**

(https://gov.wales/topics/educationandskills/schoolshome/parents/education-begins-at-home/?lang=en)

#### The British Industrial Strategy: Building a Britain for the Future

(https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment data/file/664563 /industrial-strategy-white-paper-web-ready-version.pdf)

THE House of Commons Science and Technology Committee Industrial Strategy: Science and STEM Skills -Thirteenth Report of Session 2016-17

(https://publications.parliament.uk/pa/cm201617/cmselect/cmsctech/991/991.pdf

British Industrial Strategy: Science and STEM Skills 29 March 2017

(https://publications.parliament.uk/pa/cm201617/cmselect/cmsctech/991/991.pdf)

The Scottish Strategy - SCIENCE TECHNOLOGY ENGINEERING MATHEMATICS Education and Training Strategy for Scotland (http://www.gov.scot/Resource/0052/00526536.pdf)

The Roots of STEM (Center for Childhood Creativity 2018) (http://centerforchildhoodcreativity.org/wpcontent/uploads/sites/2/2018/02/CCC The Roots of STEM Early Learning.pdf)

