

ANNEX 2

Draft North Wales Regional STEM Statement

Note – This Statement is applicable for Options 2, 3 and 4

North Wales Regional STEM Statement

The North Wales STEM Statement relates to all the additional interventions and experiences that bring STEM subjects to life for 3-19 year-old learners. The STEM Framework will enrich, extend and support the more formal school-based curriculum and aim to enthuse and inspire young learners.

The Vision

Helping to empower future generations through STEM to develop interesting and rewarding careers and grow a dynamic and innovative North Wales economy. This will be done by providing all North Wales learners with world class STEM experiences and opportunities.

Goals

- To enthuse and inspire young learners in STEM by enriching, extending and supporting the school-based experiences of young learners by providing high-quality, co-ordinated interventions, wherever possible in the language of their school/college tuition
- To raise awareness of the available progression routes for study in STEM areas in North Wales
- To ensure real-life experiences and to raise the awareness of the employment possibilities in North Wales in its widest sense;
 - by developing partnerships with regional employers, large and small, so that they can form part of the extended provision, and also develop greater relationships with their local schools
 - by promoting self-employment and technical entrepreneurship
 - by promoting work in STEM areas in education and research
- To ensure Diversity, Equity and Inclusion in all STEM activities and programmes, breaking down traditional barriers and gender stereotyping
- To ensure ways of providing experiences to learners that overcome socio-economic factors of differing areas, financial restraints facing schools etc. - breaking down any barriers to access
- To ensure that all young learners have access to the extended STEM activities
- To engage all key partners in the planning and delivery of the STEM Framework
- To “influence the influencers” (schools, parents and teachers) to ensure widespread engagement with the Framework.

Roles and Responsibilities

Schools (Secondary and Primary) and Colleges

- Ensure that all pupils have access to appropriate STEM experiences from the Framework at least once per school year, with a target of 1 per school term (in the case of 16-19 learners, this will refer to those following STEM programmes of study)
- Identify a STEM Co-ordinator within the school/college who will promote and drive the work
- Ensure that the experience is related to the pupils’ curriculum at that time and that it also builds on, and extends, the young learners’ current school-based learning

- Ensure that the experience provided to pupils provides progression from previous experiences
- Work with local/regional employers and Careers Wales to enhance their pupils' awareness of STEM based careers
- Work with the North Wales Colleges, Universities and Careers Wales to enhance their pupils' awareness and understanding of progression in STEM at 16 years of age and 18 years of age – to include Apprenticeships
- To promote and support teachers Continual Professional Development in STEM and matters related to the STEM Framework
- Work to ensure that the additional STEM experiences are in the language of the pupils' school tuition, wherever possible

Local 14-19 Networks

- Promote the **sySTEMatic** experiences and interventions to all members of the networks
- Actively promote engagement by all schools and colleges with the **sySTEMatic** programme
- Seek ways of further enhancing the work for the benefit of the learners

Employers

- Work with local/regional schools and Careers Wales to enhance their pupils' awareness of STEM based careers
- Work with the school to ensure that all pupils have access to suitable STEM experiences from the Framework
- Where possible provide funding to support STEM activities for schools and promote the activities (be they in the schools, employer sites or in a STEM Hub)
- Work with the school to ensure that the experience is related to the pupils' curriculum at that time and that it also builds on, and extends, the young learners' current school-based learning
- Work to ensure that the additional STEM experiences are in the language of the pupils' school tuition, wherever possible

Providers of extended STEM experiences (including employers, HEIs, FEIs and other projects)

- Work with local/regional schools to enhance their pupils' awareness of STEM based careers
- Work with the school to ensure that all pupils have access to suitable STEM experiences from the Framework
- Where possible provide funding to support STEM activities for schools and promote the activities (be they in the schools, providers facilities or in a STEM Hub)
- Work with the school to ensure that the experience is related to the pupils' curriculum at that time and that it also builds on, and extends, the young learners' current school-based learning
- Work to ensure that the additional STEM experiences are in the language of the pupils' school tuition, wherever possible

Careers Wales

- Work with the STEM Hubs, schools, employers and colleges to promote STEM employment and careers in North Wales (and beyond)

GWe

- Promote and support the STEM Framework and its development
- Promote the provision with North Wales' schools at leadership and delivery levels

- Provide the necessary challenge to schools to ensure effective engagement
- Promote and arrange staff CPD that is supportive of, and aligned with, the STEM Framework

NWEAB

- Work with member Local Authorities, and their education departments, to ensure that all schools across North Wales are aware of the importance of the STEM Framework and also to ensure engagement from schools across the region
- Provide support funding, where possible and work with Welsh Government to access additional funding to support the development
- Place a requirement on the Regional Skills Partnership to promote, support and evaluate the development on an on-going basis

Regional Skills Partnership

- Promote, support and evaluate the success of the development on an on-going basis by developing suitable metrics and measures
- Work to ensure engagement by all relevant employers in the region
- Work with differing STEM-related bodies, organisations and projects to ensure engagement and support

Welsh Government

- Support the North Wales RSP in promoting and supporting the STEM Framework, including financially
- Work with differing STEM-related bodies, organisations and projects to ensure engagement and support
- Work with national bodies (CBI, FSB etc) to ensure engagement and support

Intended Outcomes

Annual targets to measure the success of the programme will be set at a sub-regional level. These targets will then form part of the sub-regional delivery plans and will be monitored quarterly by the Regional Skills Partnership. It is anticipated that the measurable targets will relate to the outcomes below:

- A fundamental step change to access to STEM enrichment activities for all learners of all interests and abilities, and from all backgrounds
- A consistent inclusion of learners into STEM activities across all schools and ages
- An embedded Framework and arrangements (including the STEM Hubs) with long term support, that will enshrine these experiences and opportunities for young people for the next 20 years
- A greater number of young learners choosing to follow STEM courses at 16 years of age, 19 years of age and, in time, an educational career in STEM
- An increased interest in STEM-based Apprenticeships (at all levels, including Degree Apprenticeships)
- Greater success reported by employers in recruitment to STEM related employment and career paths
- Enhanced relationships between employers and schools across North Wales
- A positive impact on North Wales economy