

# Written evidence submitted by Techniquest Glyndŵr (COM0133)

1. Executive Summary
  - 1.1 Techniquest Glyndŵr is North Wales' number one science discovery centre, communicating STEM to over 80,000 people a year.
  - 1.2 Techniquest Glyndŵr uses a number of different methods to communicate STEM.
  - 1.3 Input from local STEM industry partners helps dispel misconceptions about the work of STEM professionals.
  - 1.4 Techniquest Glyndŵr promotes STEM in fun and interactive ways.
  - 1.5 Techniquest Glyndŵr collaborates with others to share ideas and ensure the accuracy of information presented.
  
2. Background
  - 2.1 Techniquest Glyndŵr is operated by North Wales Science, a company limited by guarantee and a registered charity. North Wales Science is governed by a council of members.
  - 2.2 Techniquest Glyndŵr's principal objectives are to promote the advancement of education and learning, particularly amongst children, of science and technology and in particular to do so by maintaining and carrying out an exhibition to explore various scientific concepts. Techniquest Glyndŵr aims to encourage an awareness amongst children of the significance of science and technology in society and to promote public understanding of science and technology through the delivery of educational programmes, specialist events and other such activities as the company deems necessary.
  - 2.3 Techniquest Glyndŵr was set up in 2003 under the name Techniquest @NEWI. The science discovery centre was opened as part of the science festival on the university campus now known as Wrexham Glyndŵr University.
  - 2.4 Techniquest Glyndŵr's centre currently operates over four buildings, incorporating hands-on exhibition areas, a theatre, lab, LEGO Education Innovation Studio and a low-light area.
  - 2.5 Techniquest Glyndŵr operates an outreach programme, taking STEM (science, technology, engineering and maths) activities to schools and community events across north Wales, Cheshire, Shropshire and the Wirral.
  
3. Current STEM Engagement
  - 3.1 In the year ending 31<sup>st</sup> July 2016, Techniquest Glyndŵr engaged with over 80,000 people. This consisted of roughly 25,000 public visitors to the centre, 17,000 community outreach engagements, 8,000 visits from school groups to the centre and 30,000 school outreach engagements. Engagement figures have doubled over the five years to 2015 from 41,100 in 2010.
  - 3.2 Techniquest Glyndŵr is based in Wrexham, North East Wales. We engage with schoolchildren and families across North Wales and North West England, normally within a 90-minute travel time of our centre.
  - 3.3 Techniquest Glyndŵr engages with school audiences from nursery through to A-level. The core primary programme consists of 28 shows and workshops, and the secondary programme has 24 activities available.
  - 3.4 Our family programmes aim to promote public understanding of STEM, through hands-on activities in our centre and interactive demonstrations out in the local community.
  - 3.5 Techniquest Glyndŵr offers a range of specialist activities in addition to the core activities at the centre including a TechZone robotics and programming Saturday club for school-aged children, monthly Toddler Days, and an Astronomy Club in the winter months.

## Written evidence submitted by Techniquest Glyndŵr (COM0133)

### 4. Science Communication

4.1 Techniquest Glyndŵr encourages the public to engage with Wrexham Glyndŵr University and local STEM industries:

- Our buildings are located on the university's main campus
- We work collaboratively and often have a joint presence at events
- Academics and STEM professionals from local STEM companies support our activities, especially with secondary schools and colleges

4.2 Techniquest Glyndŵr uses a number of different methods to communicate STEM:

- Hands-on exhibition areas within our science discovery centre
- Live presenter-led science shows during weekends and school holidays with different themes every couple of months
- Interactive table-top science experiments for community outreach events
- Curriculum linked education programme of shows and workshops

4.3 Techniquest Glyndŵr promotes STEM in fun and engaging ways. We also:

- Highlight career links and showcase how our activities link to the world of work
- Engage with new audiences by creating pop-up exhibitions, such as in Wrexham town centre and Llangollen tourist information centre
- Keep our activities up-to-date and relevant, through refreshment programmes

4.4 Techniquest Glyndŵr collaborates with other science communicators:

- We are members of the UK Association of Science and Discovery Centres
- We have participated in 'Hands-on DNA', 'Destination Space' and 'Explore Your Universe' programmes with other centres
- We work with STEM institutions such as the Royal Society of Chemistry, Institute of Physics and Royal Academy of Engineering
- Collaborations help ensure the accuracy of information shared with the public

4.5 Techniquest Glyndŵr focusses on disadvantaged and underserved areas:

- When we take activities on outreach, we go into communities who might not come out to our science discovery centre
- We target rural schools, offering a reduced cluster rate for schools with low pupil numbers
- We work with Communities First teams to offer funded activities for schools located in areas in the top 20% of the Welsh Index of Multiple Deprivation
- We work with underachieving schools such as Schools Challenge Cymru

4.6 Techniquest Glyndŵr continues to improve its STEM offering:

- We continually look for sponsorship and grant opportunities to enhance our engagement with school and community audiences
- We refresh our programmes, to keep in-line with the national curriculum and to educate visitors about current science topics
- We are looking to increase our collaborative work with other STEM stakeholders
- We are moving with the times, communicating through digital media more than ever before