SPRING TERM 2022

This term has seen the Blaenau Gwent STEM Project deliver two virtual events, facilitate thirty-one sessions with business partners and forty-four sessions with providers.

We are continuously looking to add STEM related businesses to our database and will be providing training to them regarding the new curriculum. This will ensure they fully understand your needs moving forward.

Please feel free to get in touch for any STEM support.

Wishing you all a Happy Easter!

CLUSTER UPDATE

Ebbw Fawr Primary enjoyed a visit from Medical Mavericks. They learnt about their bodies and that there are over 300 job roles within the NHS. They thoroughly enjoyed testing out the equipment! Medical Mavericks also visited Beaufort and Willowtown and are clearly inspiring learners about the medical sector.

Willowtown Primary enjoyed a "brilliant workshop" from Welsh Water. Solving the code to get the beebot to the correct place on the map was a particular highlight. This shows how coding and problem solving skills are key in any sector today.

Willowtown Primary also had a visit from Size of Wales for where they learnt a lot about deforestation. Some fascinated faces there!

Ebbw Fawr Secondary School's Learning Resource Base have had a range of visits from the Blaenau Gwent Recycling Officer, Blaenau Gwent Biodiversity Officer and Welsh Water. They enjoy coding so had Technocamps visit and learners were so engaged that more are planned! Fantastic to see that STEM is inclusive and enthuses all learners!

UPCOMING EVENTS

18th May National Numeracy Day

20th May World Bee Day

5th June World Environment Day

20th June STEM Clubs Week

23rd June Women in Engineering Day

1st July Plastic Free July

7th July World Chocolate Day

USEFUL RESOURCES

Keep Wales Tidy
Keep Wales Tidy are launching Litter Free Zones. Schools can register and can get 100 free litter picking kits. https://keepwalestidy.cymru/caru-cymru/litter-free-zones/

RHS Campaign for School Gardening
Registration is free and there are free welcome packs that contain seeds, plant labels, stickers, posters and more. There are opportunities for schools to receive rewards, certificates and support as they progress through the School Gardening Awards.
https://schoolgardening.rhs.org.uk/home

National Numeracy Day
Resources will be offered over the next month. Click here to sign up.

Premier League Primary Stars
Resources for Foundation Phase, KS1 and KS2 on Maths, English, PE and cross-curricular.
https://plprimarystars.com

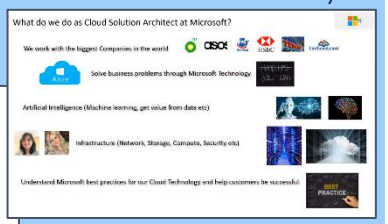
CLUSTER UPDATE (Continued)

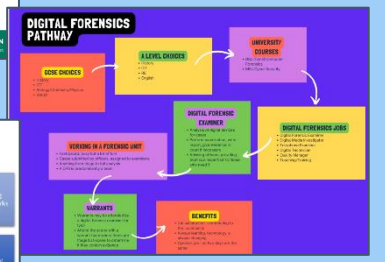
Hands on Science visited Cwm Primary to deliver sessions on skeletons, electricity and CSI: Fingerprints. The learners had fun and the STEM aspects were certainly brought to life for them. Hands on Science have also visited a number of other schools in the area and have said how engaged and enthusiastic learners have been that is has been a joy to work with the schools.

Glyncoed Primary have been learning about renewable energy in the community. As part of this topic, they had a visit from Dulas who have pioneered the use of renewable energy for over 35 years. Dulas "captivated them with their practical and informative session, inspiring the future generation to be ethical and informed". The school also hosted the Eden Education Centre where they trialled coding Lego cars and wind turbines – definitely STEM in action!

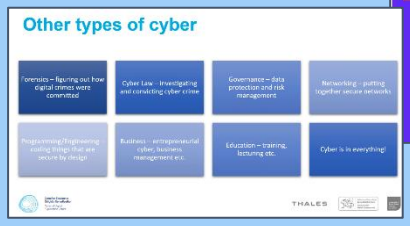
STEM EVENTS

The Blaenau Gwent STEM Inspiration Event, aimed at learners taking option choices, was held virtually on February 9th 2022. The sessions were streamed live and made available to all four secondary schools in the authority.





Five sessions were delivered to cover cyber crime, cyber security, civil engineering, engineering apprentices and ICT careers. These sectors are growing in the authority and the sessions really captured learners interest and made them realise the importance of STEM skills.

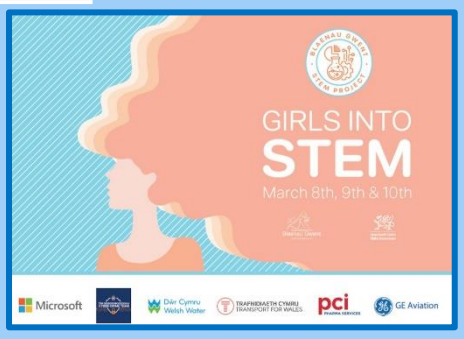


Learners and teachers were asked to complete online evaluations. Results have been analysed and performance reports have been sent to each partner.

The results showed that learners had improved their knowledge about STEM careers and had increased their interest and enthusiasm in working in STEM.

STEM EVENTS (Continued)

Blaenau Gwent Girls into STEM and Careers Week Event was held over 8th, 9th and 10th March 2022. The event was created based on a response from Rhos Y Fedwen Primary where they wanted an event to coincide with International Women's Day and to use female STEM role models to break down stereotypes that still exist. The sessions also aimed to show the range of STEM jobs within each company. Each company prepared interesting and interactive sessions. The learners provided each company with a huge range of questions to answer at the end of each session which showed their interest – they certainly grilled some companies!



St. Joseph's RC Primary enjoyed learning about STEM careers, helping create ambitious, capable learners!

Glanhowy Primary learners said the event "ignited and inspired interest in a wide range of STEM careers. There are lots of exciting opportunities in Blaenau Gwent".

Coed-y-Garn Primary enjoyed the session from Gwent Police Cyber Team – the Kahoot quiz saw fierce competition!

Rhos Y Fedwen learners thoroughly enjoyed the PCI session – the apprentices from PCI were bombarded with questions!

NEW PROVIDERS

Explorer Dome offers hands-on demonstrations & stunning visuals: Explorer Dome is presenter-led & fun! They have a variety of shows that cover aspects of physics, chemistry & biology. The shows are cross-curricular, designed to support & enhance science learning at all key stages.

Institute of Physics are running multi-intervention cycles of mentoring in secondary schools (in-person and virtually). This is suitable for Y10 & Y11 and schools can apply for the next round of mentoring. They are keen to work with more schools in Blaenau Gwent. They also offer more general Physics outreach activities.

In Blaenau Gwent 14 Schools have the Green Flag and **Keep Wales Tidy** are eager to work with all schools to achieve this. They are willing to work with the Blaenau Gwent Recycling and Biodiversity Officers to give a rounded experience to learners. This links perfectly with the new curriculum.

Hedgehog Friendly Campus is a new programme at Cardiff University. It is part of a national campaign to help hedgehogs thrive in primary & secondary school sites. They offer sessions to monitor the area and collect footprint evidence, make hedgehog highways and to create wild spaces at schools with flower bombs. Schools can apply for bronze, silver and gold status.

NEW INDUSTRY PARTNERS

We are constantly seeking new partners to work us and are excited to welcome our latest additions who have recently pledged their commitment to work with schools in Blaenau Gwent:

School of Thought will work with GCSE learners to make them realise the automotive sector is more than mechanics. They will promote the financial skills, use of software and business skills. They will attend career events and links to local businesses.

From September 2022, Davies Homes are keen to work with secondary schools. They will offer presentations to give an overview of a day on site, an insight into different job roles and site visits to see the roles in action.

PCI will deliver sessions to primary and secondary schools which are awareness sessions. They currently creating educational resources and are hoping to offer site visits again soon. They will also attend careers events and parent's evenings to give more information about the range of jobs available.

Transport for Wales will work with primary and secondary schools. They delivered a fantastic online session for us and are open to requests.

Sabrina Lee, BBC Meteorologist, is a STEM ambassador. She is willing to do in-person or virtual visits and carry out weather-related experiments. She also offers career talks.

Financial education programmes are available for primary and secondary learners. Topics include how to spend wisely, signs of fraud, basics of banking and managing outgoings.

Balfour Beatty are willing to work with primary and secondary schools. They will attend careers events and carry out workshops – they are open to requests!

NDEC

Primary School Opportunities:

Available in the summer term:

The Secret Chest (Y4: 1 hour session) Interactive introduction to the world of cyber security.

Cyber Heroes (Y6: 2 to 3 hour session) Learners create a video or deliver a session to teach elderly people how to stay safe online.

Available in the autumn term:

Digital Forensics (Y5) – get in early!

Secondary School Opportunities:

NDEC are booking in trips for GCSE Computer Science, IT and Digital Technology learners. The trip aims to inspire learners to consider a career in cyber security. The visit will be underpinned by relating cyber security in the GCSE specifications to real industry context.

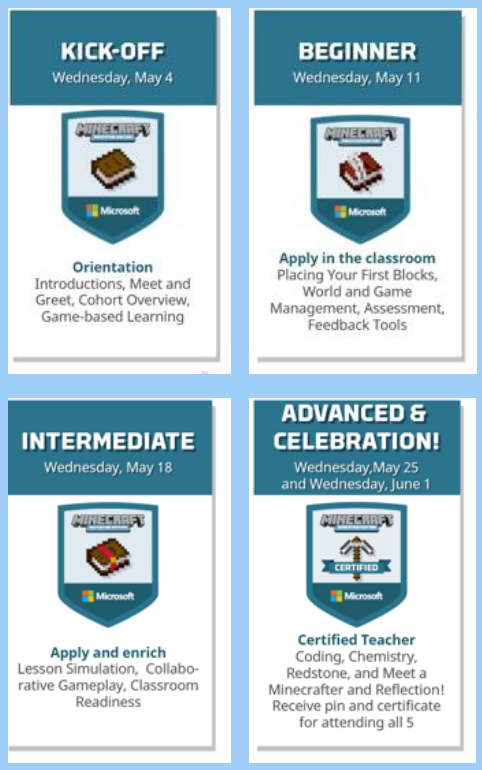
MICROSOFT

Microsoft are offering training as part of the May Minecraft Virtual Teacher Academy.

It is a free 5-week online course designed to help you master Minecraft: Education Edition and earn your Minecraft Certified Teacher Badge.

There will be weekly meetings in May and June to complete the content. *If you attend all five live cohort events, you will be eligible to receive a professional development certificate for your time and a special gift.*

Click here to register if you want to take part. You will need to register by 22nd April.



**Note – you must have Minecraft: Education Edition at your school to be eligible and be available to come to all sessions.*

If you would like take advantage of any of the opportunities shown, or if you have any questions or requests, please email us anytime:

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Follow us on Twitter to see the resources we share and tag us in your STEM activities:

@bgcbcstem