

Digital Toolkit



Bryn Celynnog Comprehensive School

Ensuring our learners use technology safely, whilst developing the vital digital skills that are required for students' learning, is key at Bryn Celynnog. This concise toolkit aims to advise parents, staff and students how to access online tools safely whilst developing the skills required for learners to develop into digitally competent citizens.

Digital Competence Framework

Digital competence is the portfolio of knowledge, skills and attitudes that enable the confident, creative and vital use of technologies required for a 21st Century global society.

Digital competence framework is part of the three cross-curricular responsibilities, alongside literacy and numeracy. It focuses on developing digital skills which can be applied to all subjects.

The DCF comprises of four high-level strands:

- Citizenship.
- Interacting and collaborating.
- Producing.
- Data and computational thinking.



DCF Strands and Elements

Citizenship

- › Identity, image and reputation
- › Health and well-being
- › Digital rights, licensing and ownership
- › Online behaviour and cyberbullying

Interacting and Collaborating

- › Communication
- › Collaboration
- › Storing and sharing

Producing

- › Planning, sourcing and searching
- › Creating
- › Evaluating and improving

Data and Computational Thinking

- › Problem solving and modelling
- › Data and information literacy

If you require any further information please email
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Social Media

The internet is a powerful tool that can help us to gather information and connect with people from all around the world. While this can be used to our advantage, it is vital to consider the dangers of online communications. Social media such as Facebook, Snapchat and Instagram, as fun as they are, can open young people to many dangers if it is not used carefully. Below are Bryn Celynnog's Top Tips for encouraging the safe use of social media platforms:

1. Keep your **PRIVACY SETTINGS** as high as possible.
2. **KNOW YOUR FRIENDS**. Never befriend people you don't know.
3. Never reveal **PERSONAL INFORMATION** or your **LOCATION** on social media platforms.
4. **RESPECT** other people's views, even if you don't agree with them.
5. Know how to **BLOCK** or **REPORT** content on each social media platform you use.
6. If you see something online that makes you feel **UNCOMFORTABLE**, **UNSAFE** or **WORRIED**, leave the website and tell a trusted adult immediately.
7. Think carefully before **POSTING PHOTOGRAPHS** and **VIDEOS** of yourself online, once online these will no longer be your property and may be used to cause you distress.
8. Never share your **PASSWORDS** with others.
9. **DON'T MEET UP WITH PEOPLE** you've met online. Speak to a trusted adult if someone has asked you to meet up with them. Remember that not everyone online is who they say they are.
10. **THINK CAREFULLY** about what you say before you **POST** something online.



Age Restrictions on Social Media



Twitter

Facebook

SnapChat

Instagram

Pinterest

Google+

Tumblr



Whatsapp



YouTube
Flickr
Kik

With regards to age restrictions, it's always better to wait until the required age to join any social media platform. The rules around age relate to privacy, but are also relevant to your safety. Young people also risk being exposed to content which is intended for older users when they use social media websites that are designed for an older audience.

Screen Addiction

Smartphone addiction is a recognised medical condition in the UK.

It is a condition that affects children as young as 13.

It can cause

- sleep deprivation
- lack of confidence
- mental health conditions

99% of children aged 12 - 15 go online for over 20 hours a week.

Limit your screen time for a balanced and healthy life.

Cyber Bullying

What is Cyber Bullying?

Cyber bullying is any form of bullying which takes place online, this can be via messaging apps, social media websites and gaming websites.



Types of cyber bullying

Harassment

Being abusive to someone by sending offensive, rude, and insulting messages.
Posting humiliating comments or photographs.

Denigration

Sharing fake information about another person.
Sharing photos of someone for the purpose to ridicule, spreading fake rumours and gossip.

Impersonation

Hacking someone's email or social networking account and using the person's online identity to send or post mean or embarrassing content.
Making fake profiles on social network sites.

Cyber Stalking

Sending messages that include threats of harm, harassment, intimidating messages, or engaging in other online activities that make a person afraid for their safety.

Exclusion

Intentionally leaving someone out of a group such as group messages, online apps, gaming sites and other online engagement to cause the person distress.



Inappropriate Images

- Always make sure that you have the person's permission to take a photograph and that they are happy for you to upload it to the internet.
- Be very careful of tagging and hashtags (this will share the photograph to a much wider audience than you may have intended.)
- Avoid harassment by uploading humiliating photographs or videos.
- Never digitally manipulate/edit photographs of others and upload them to the internet.
- Never allow someone to take photographs of you that might embarrass you.

How to report bullying or abuse on social media

Facebook

Use the report links which appear near the post, it is usually a drop down arrow which gives you menu option to report the image, post or comment.

Twitter

Unfollow that person.

Block the person by clicking on the head icon on their profile and select block user.

YouTube

Any inappropriate videos on YouTube can be flagged by clicking on the little flag bottom right of the video.

Snapchat

Block someone by selecting the *Menu icon*, followed by My Friends, locate their name in the list and swipe right across their name.

To delete someone select Delete. If you receive inappropriate or upsetting behaviour from someone report it by filling out their online form.

WhatsApp

You can block and delete the contact from your smart phone. You can find out more by emailing WhatsApp at support@whatsapp.com.

Digital Footprint

What is a digital footprint?

Every time you go online you leave a trail or record known as your 'digital footprint'. This includes your social media activity, your online browsing history, any photographs and videos you have uploaded or been tagged in.



Passive Digital Footprint

Data is collected about someone without them knowing.

Active Digital Footprint

Personal data is shared deliberately by someone.

Online communication is PUBLIC and PERMANENT

- Any communication online, including posting via social media, writing a blog or private messaging creates a digital footprint and can add to your reputation. Something you post when you are 13 may resurface when you are an adult.
- Everything we upload to the internet is permanent, even if you delete content and photographs from your social media it will still remain online.
- Posting something on your 'PRIVATE' social media platform can also become PUBLIC. Always consider the footprints you are leaving behind.

LOG ON...LOG OFF

**Protect your identity
and your digital
footprint**

Every computer that is connected to the internet has an unique string of numbers known as an **IP Address**. This will allow websites to be able to trace any online activity, e.g. if you experience any abusive or dangerous activity online the police can use IP addresses to try to find out where the messages are coming from.

Smart devices, such as a smart watch or smart phone can track where you go, they are able to use their built in microphones to hear what is being said. All of these things collect information about you and will add to your digital footprint.

Fake News

What is Fake news?

Fake news is any information, image or video that has been purposefully created to misinform or deceive people. It is important that you learn how to distinguish between real news and fake news.



How to spot fake news

- Check the URL address. Does the domain name seem strange?
- Read any comments the webpage may have. Do the comments suggest that the content is not real?
- Who wrote the content or created the video? Was the information created by a reliable source?



Copyright

The internet contains a vast amount of information but can we use it?

The Copyright, Designs and Patents Act has two main purposes:

1. To ensure people are rewarded for their endeavours.
2. To give protection to the copyright holder if someone tries to copy or steal their work.

- Copying text from websites and claiming it as your own
- Downloading music or video
- Copying music or video
- Copying images or photographs from the internet
- Copying software applications



Data and Computational Thinking

There are four techniques or cornerstones to computational thinking:

- Decomposition
- Abstraction
- Pattern Recognition
- Algorithms

Decomposition

This technique involves breaking a problem down into smaller, more manageable parts that are easier to understand.

Abstraction

The process of filtering out the irrelevant information or factors and only concentrating on what is important.

Pattern Recognition

This technique involves finding similarities or patterns among the small, decomposed problems enabling you to solve more easily.

Algorithms

This techniques involves developing a step by step solution to the problem.

Each of the four techniques have equal importance when trying to solve a problem.



Computational Thinking

Computational thinking is not thinking like a computer, remember computers do not think. It is the process of solving a complex problem.

Computational thinking is not only relevant to Computer Science where the four techniques can be used to program (tell the computer what to do)

Using the four cornerstones of Computational Thinking in different subjects:

DECOMPOSITION

Breaking down a word phonetically in Welsh.

DECOMPOSITION

Analysing the structure of a poem in English.

ALGORITHM

Creating a timeline of events in History.

PATTERN RECOGNITION

Finding similarities to solve a Linear Sequence in Maths

ABSTRACTION

Summarising your key findings in Science.

DECOMPOSITION

Analysing the components of a swimming technique in PE.

ALGORITHM

Explaining the process of photosynthesis in Science.

ABSTRACTION

Writing a synopsis of a performance in Performing Arts.

Algorithms

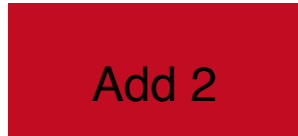
Flow Chart Symbols

Start/End



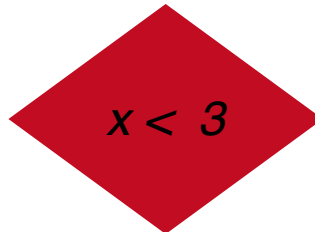
The start and end of a flow diagram is represented using a rounded rectangle.

Process



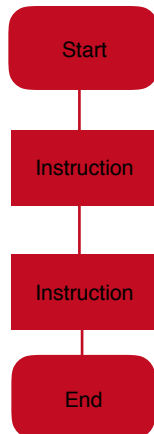
The processes are represented using a rectangle. The process is an instruction or task that must be carried out.

Decision



The decision process is represented using a rhombus. It will always have one input and is used when there is a possibility of two outputs.

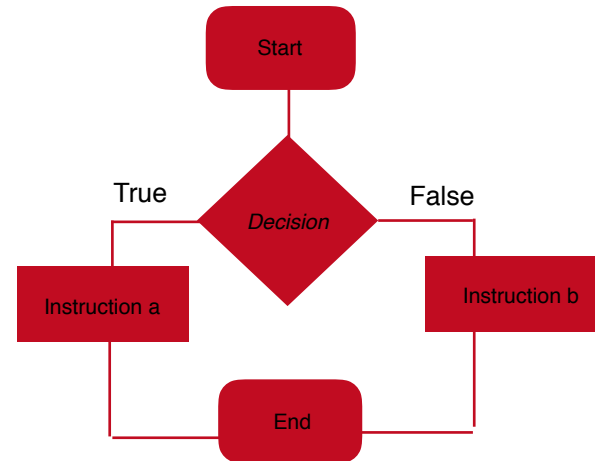
Sequence Algorithm



START SEQUENCE
COMPLETE FIRST INSTRUCTION
COMPLETE SECOND INSTRUCTION
END SEQUENCE

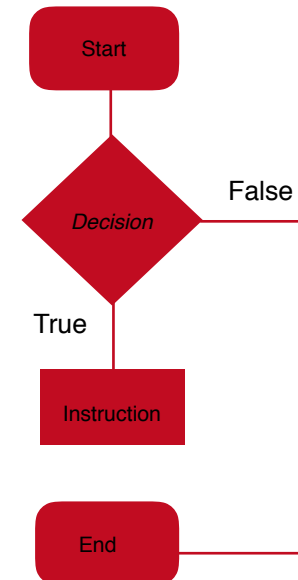


Selection Algorithm



START SEQUENCE
IF DECISION IS TRUE
THEN COMPLETE INSTRUCTION A
ELSE COMPLETE INSTRUCTION B
END SEQUENCE

While Algorithm



START SEQUENCE
WHILE DECISION IS TRUE
COMPLETE INSTRUCTION
END SEQUENCE



Microsoft Office 365

All pupils at Bryn Celynnog have access to the latest Microsoft Office applications as well as other cloud-based services.

Microsoft Office 365 is your Office in the cloud! It will allow you to create, collaborate, edit, communicate and save school work as well as homework on your online space.

You will be able to access work on a range of devices, including PCs, laptops, tablets and smart phones.

Microsoft 365 can be accessed at home, in school or on the go, provided you have an internet connection.

Students can access their 365 account with their school email via the link on the Bryn Celynnog Home page.

Student email format:
username@bryncelynnog.org.uk

Password is the same as the password used to access the school network.



The One Drive app is your online storage space. You can save all of your files in one place enabling you to access them at home and well as in school, edit and share them with your peers and teachers.



PowerPoint is an application which allows you to create and show slides to support a presentation. You can combine text, graphics and multi-media content to create professional presentations.



Word is a word-processing application which allows you to write essays, reports and letters.



Excel is an electronic spreadsheet application that is used for storing, organising, and manipulating data.



Forms you can use to answer your homework quizzes. Develop surveys and quizzes of your own and share with your peers and teachers.



The Outlook app allows you to access your email account. Enabling you to email your peers for feedback and send homework files to your teacher.



Sway allows you to gather, format, and share reports, newsletters, web pages, blogs and interactive presentations.

