

# e-Safety Newsletter

- Welcome Back
- Big Data and The Internet of Things
- Computing Corner

Edition 17

*welcome back..*

A very happy new year to you. I hope you have had a refreshing break, ready for the excitement and challenges of the new year.

I'm not one for new years resolutions, but I am determined to make some big changes this year, changes that will help you to hopefully make your job easier. I have some ideas that are already in the planning stage, but if there is anything you would like to see please let me know .

Unfortunately, e-safety is still seen by many as a very negative thing; for me e-safety is all about engaging, educating, empowering; that's what the 'e' in e-safety stands for and I'm determined to stick to that. A new addition in this newsletter, Computing Corner. This is an initiative to share great resources from teachers and others in regards to the new Computing curriculum. I hope you enjoy the newsletter, and as usual feel free to get in touch.

*Alan Mackenzie*

**Your personal information has never before had so much monetary value, and it will have even more value in the future. Should we be concerned?**

Have you ever heard of **Big Data** or **The Internet of Things**? There's a good chance you may have glimpsed something in passing and not thought too much about it. It's a very interesting area and there are some e-safety issues that we all need to be aware of.

Big Data and The Internet of Things are both huge, complicated areas, so forgive me for simplifying the explanations.

## **Big Data**

It will come as no surprise to anybody that all this communication we have across the

Internet, all this sharing of information, the advertisements we click on, the searches within engines such as Google, everything we sign up to, everything we buy and so much more - is all being collected by someone, somewhere for a variety of reasons.

These 'data sets' hold vast amounts of information about what we do and the way we do it; one of the big challenges of the future is to understand the best way to use these data sets to drive economic growth, improve services and so much more.

Many are sceptical of this type of data collection,

others welcome it. For some it is a step too far in regards to invasion of privacy, for others there are huge benefits to us all in a variety of ways such as healthcare, education and policing.

Every bit of data about us is useful to someone, and this includes advertisers and marketers. For example do you use Google for your searches? Google as well as others collect vast amounts of data; this search history of individuals is hugely valuable to target advertising. Have you ever done a search for something on the Internet and then wondered why days or weeks later you are seeing the same or similar adverts to the items you were searching on?

But it doesn't stop there. Imagine going into a shop; as you walk in there is a big screen and by amazing coincidence the item you were searching for days earlier is being showcased on the screen. Coincidence? Not really, this is Big Data and.....

## **The Internet of Things**

The most basic and generalized explanation of The Internet of Things is - everything connected to everything. This is the vision of the future; it is already happening and it is getting bigger - fast!

## **Going to BETT?**

**Come and say hello.**

I'll be hosting an e-Safety Clinic on the Impero stand all day Thursday and Friday.

You can't miss me, an almost-bald head and wearing my e-safety adviser badge.

**Stand D286**

Imagine your fridge contacting your supermarket when you are running out of milk; imagine speaking to your phone and saying, "going out," and all the lights switch off. What about travelling home, 10 miles out and your heating comes on automatically so that it is nice and warm for you? These sorts of things can and already are happening, but what about the shopping scenario?

The concept of The Internet of Things means that everything has to be uniquely identifiable; many things already are. You are unique, your phone and any other device you use is unique. The combination of you and your device being identified is hugely valuable.

## So what?

Let's stay with the shopping analogy. You have been browsing the web from your PC at home, perhaps via your iPad or phone. That history and your habits are being collected. You and your devices are virtually connected and that includes your phone.

Your phone is continually transmitting various bits of data; that includes the unique identifier of the phone. With a relatively simple wireless setup in the shop they now know who you are, what you have been browsing and shopping for, and therefore what advertising can be targeted to you when you enter or walk round the shop.

Furthermore, as you leave that shop and go into the next one, that is logged within a

data set; your shopping habits and history are hugely valuable to marketers and advertisers.

Although this is a really basic example, you can see that the combination of Big Data and The Internet of Things has huge implications for the future. Quite what these implications are nobody really knows yet, it is un-chartered waters.

Whether this is a good thing or a bad thing is a matter of personal interpretation; personally I think it's a good thing, I wholeheartedly embrace innovation such as this - as long as it is used appropriately, and that's the key! We all know that the positives of the internet and technology far outweigh the negatives, but we do have to be aware of the negatives in order that we can mitigate risk.

## What does this mean and should I be concerned?

From an e-safety perspective the key is personal data; this is data that can identify us as an individual. Some people are very private and want to remain that way, some are not so bothered. One of the key messages we always tell children and young people is, "Never share personal information." In my opinion this is wrong, we are in a different world whether we like it or not. It is impossible not to share personal information these days in one way or another, what we all have to understand is the appropriate sharing of personal information, and children need to learn from a young age: what is personal data; what is appropriate sharing and what isn't; how can that data be used for good and for bad?

A great way to engage the students is to get them debating; one side for and one side against. Forget calling it e-safety, start looking at the moral and ethical aspects, use examples such as Google reading all your Gmail emails to find out your interests.

Should you be concerned? No, generally speaking you control your own destiny, you control what information you share and to whom, it's in your hands. Knowing is empowering.

# Computing Corner

As the Computing curriculum draws ever closer I will be using this page to highlight great work and innovation from schools, teachers and others I follow on Twitter. I have also created a new website:

[www.computingexperts.co.uk](http://www.computingexperts.co.uk)

It's in the early stages at the moment, but the idea is to share information from blogs of teachers who are using and innovating with technology in the classroom, not just for Computing.

If you would like your work or that of your school featured in this newsletter or on the website then drop me an email with a link to the work.

A wonderful blog from Rebecca (@bekblayton on Twitter) and her thoughts about reviewing the new Computing curriculum at her school.

**Reviewing the New Computing Curriculum**

This link is a warning as well as an excellent educational resource from John Sutton at [Creative Blogs](#) (@HGJohn on Twitter)

**What happens when schools infringe copyright?**

With more and more schools using class blogs with students it is imperative that the school and the student knows about copyright. John shares an example of when this goes wrong and the potential financial penalty to the school.

A fantastic set of resources and information - put together by teachers for teachers, for all key stages, in regards to the Computing curriculum. The chair of the group that put the site and resources together is Bob Harrison (@bobharrisonset on Twitter).

**Computing ITT and CPD**

An interesting article from The Guardian on the challenges faced by teachers when it comes to the new Computing curriculum. IT teaching is about to be overhauled, but will it attract more children, both girls and boys, to a career in coding?

**Get with the Program**