

# Digital Learning & Technology

in Perth & Kinross

## 'Tis the season to be jolly fa la la la la etc

It can't be December can it? So begins the high speed journey through nativity plays, christmas parties, staff nights out and trying to figure out how long you've got to make your salary last until the end of January. It's a magical time that lasts right up until the 23<sup>rd</sup> January in Perth & Kinross schools... We hope you all have a fantastic break and come back refreshed on 9th January and perhaps ready to throw a bit of digital learning into the mix.

### Learning unlimited?

For some, the statement to the right seems pretty bold from Khan Academy (a non-profit organisation whose goal is to produce a free, world class, virtual school) but a version of which you'll have said to many a pupil in your time as a teacher. Yet Khan Academy gives us a real insight on the direction of travel for learners in the 21st century as it combines that powerful statement with a digital, online school that can be accessed by anyone at any time. Learning is not just up for grabs in the 50 or so minutes we have allocated to it but visible for repeat viewing and engagement throughout a young persons schooling. Khan Academy offers practice exercises, instructional videos, and a learning dashboard that "empowers learners to study at their own pace in and outside of the classroom". It covers major subjects like maths, science, computer programming, history, art history, economics, and more. They claim that the maths curriculum takes learners from nursery to calculus using state-of-the-art, adaptive technology that identifies strengths and learning gaps. They've partnered with institutions like



For free. For everyone. Forever.

NASA, The Museum of Modern Art and MIT to offer specialised content and they've purchased educational apps to give away for free.

What does this type of organisation mean for us as teachers then? Well, whilst learning isn't wholly a social activity, relationships are key to learners' skills and cognitive development, both with their peers and their teachers. There will always be the place for the teacher to expertly manage and deliver the curriculum with sound pedagogical practice and knowledge of each individual student. Learners need to be with other learners to develop aspects of themselves that are not academic and to learn together.

What we will have to acknowledge is that there are now other means for our learners to engage with the curriculum in ways that can, at times, be more relevant or engaging for them, be it a surfeit of YouTube instructional videos or games-based, personalised learning activities. By embracing the place of digital in this context we'll develop our own pedagogical practice for the benefit of our learners, who we know, can learn anything. Check out the article on Sugata Mitra later on in this newsletter.



PERTH &  
KINROSS  
COUNCIL

Don't forget that the HOUR of CODE runs from the 5<sup>th</sup> - 11<sup>th</sup> December. This is the largest coding event in the world, with tens of millions of students and staff learning about coding in exciting and engaging ways, learning from real computer scientists and getting an insight into why it is one of the most important skills to have in the next century. Find out all you need to know at <https://code.org/learn>



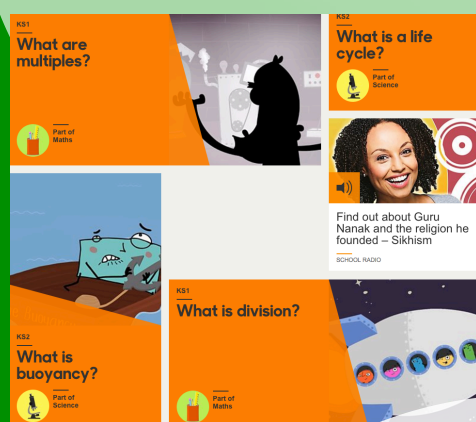


# More Wonderful Websites

## BBC Bitesize

BBC Education have been busying away like beavers over the last few years trying to build curriculum content from Third level and into Nationals, with class clips, learner guides, tests and digital content. They've been developing new primary resources too from Early to Second level, full of animations, video and lesson ideas. There's absolutely masses of stuff to look at for all stages so head off to

<http://www.bbc.co.uk/education>

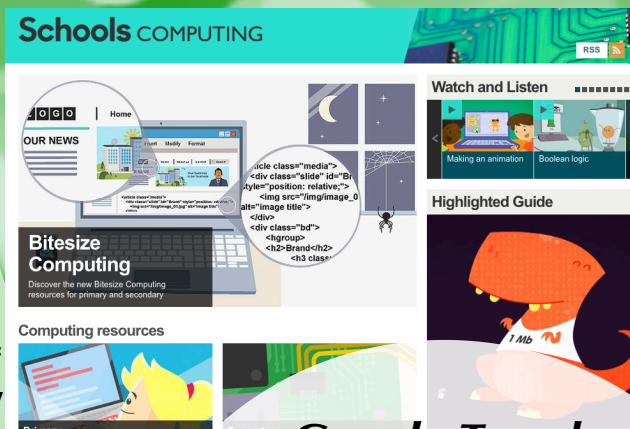


## Digital Literacy

The South West Grid for Learning (SWGfL) have amassed an AMAZING resource for schools and for all ages that pull together lesson plans and resources/worksheets & videos for the diverse range of topics that encompass Digital Literacy and Citizenship. The materials empower pupils and students to think critically, behave safely, and participate responsibly in our digital world. Utilising the best of resources from Common Sense Media, you'll be given detailed lesson plans for each category and stage. Regardless of its English Key Stage breakdown, these are some of the best teaching and learning resources we've seen.

<http://www.digital-literacy.org.uk/>

### CURRICULUM CATEGORIES



## Google Trends

Explore the search history of Google using the data they collect on their billions of daily searches. What topics are trending right now? How quickly has interest dropped out on a news story? See the peaks of interest in the US and UK elections. It's Big Data for the curious. Search David Bowie and see what you get. Why does the data look like that?



## History of English in Ten Minutes

Does what it says on the tin. Brilliant.

<https://youtu.be/H3r9bOkYW9s>

about 2000 new words  
and phrases were invented  
by William Shakespeare

William Shakespeare  
(1564-1616)



## Free Rice

For every English vocabulary question you get right 10 grains of rice are donated

#responsiblecitizens

<http://freerice.com/>



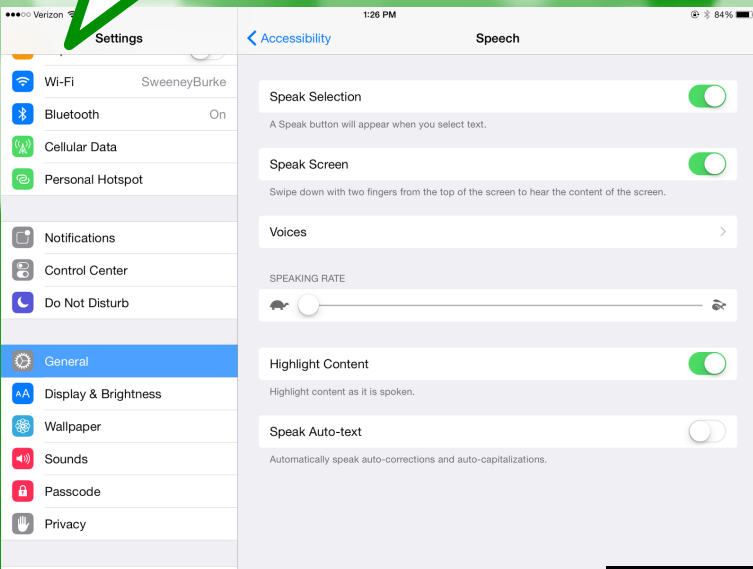
# Talk to me

Anyone with a print disability like Dyslexia will tell you that text to speech systems can make all the difference in the world to engaging with learning and making sense of the world. Studies have shown that text-to-speech improves word recognition, and vocabulary, as well as reading comprehension, fluency, accuracy and concentration. Other benefits include improved information recall, increased motivation and a more positive attitude with regard to reading. With that in mind it is worthwhile looking at some of the latest options regarding text to speech software. Check out more at

<http://www.callscotland.org.uk/information/dyslexia/>

## Text-to-Speech on Apple devices

All Apple devices have text-to-speech built in. In Settings you can choose **General - Accessibility - Speech** and choose **Speak Selection** or **Speak Screen**. Speak selection will give you an option to speak a word or a sentence when you highlight it. Speak screen will do exactly as you ask - a swipe down the screen with two fingers and your device will speak any text on the screen at that moment - be it a book, a webpage, your own notes etc. You can set it to highlight words as they are spoken, the voice that is used and change the speed at which words are narrated to you.



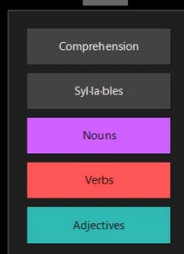
## Monsters

HackTheClassroom > Vocabulary

## Learning Tools add-in for Microsoft OneNote

For 2013 and 2016 editions of OneNote you can download the Learning Tools add-in which not only does text-to-speech but also aids comprehension by allowing you to automatically highlight verbs, adjectives or even split a word into its syllables. It highlights words as they are spoken and provides coloured overlays for specific print disability issues. All in all this becomes a really powerful and immersive toolkit with reading comprehension and words per minute improving significantly.

I am a scary monster. I've got big green body. I haven't got small nose. But I've got small teeth. I've got short green legs and big feet.



## Scottish voices for Scottish pupils

When using text-to-speech there can often be a disconnect due to the computer type voice or non-native voice reading back to you. That is why you can now download some scottish voices for text-to-speech programs. You can then read electronic books, PDF files (such as SQA exam papers), documents in Microsoft Word, web pages and create audio files using that voice.

## The voices



Heather (English language)



Stuart (English language)



Ceitidh (Gaelic language)





# Get off my iPad!!

So you've got an iPad in class and before you know it the pupils have been creating a ton of stuff - videos, animations, images and photos - and the darned thing is now full? What do you do now?

It is a common question we're asked so we thought we'd have a look at how to do exactly that using the example of getting a video off your iPad and into the cloud storage in GLOW. We also have a video example using book creator but some of you prefer the good old fashioned show me on a piece of paper, so here goes

**Step 1:** First things first - you're going to need to make sure you have the OneDrive app installed on your device. It should be there automatically if you have a council device but if not, head to the normal app store and download it - it's free.



**Step 2:** Open up the app and it will ask you to log-on with a Microsoft account. You should use your GLOW email account which will look something like this:

gw09conlonmichael@glow.sch.uk if based in a school  
gw09conlonmichael@glowmail.org.uk if not



**glow**

Sign in

gw09conlonmichael@glow.sch.uk

Password

☐ Remember my username

Sign in

[Forgotten your password?](#) - [Need A Glow Login?](#)

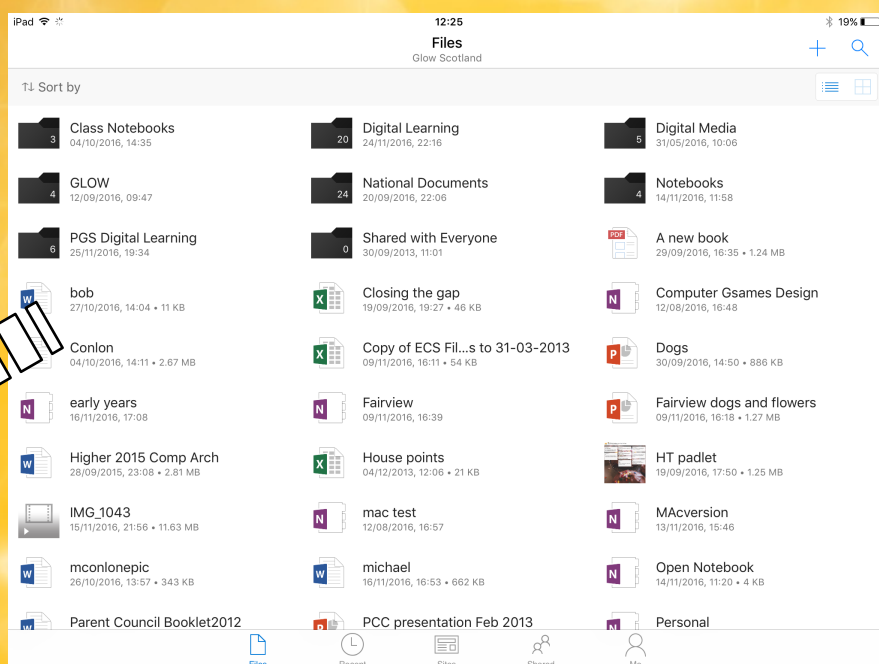
Only Glow users are allowed to access this service. If you do not have a Glow username and password then you may be committing an offence by trying to gain access to this service.

[Find out more about Glow](#)



**Step 3:** This will then take you to the normal GLOW login page where you should enter your username and password as normal.

**Step 4:** All being good, you should now be able to see all the files which you currently have saved in your OneDrive in GLOW

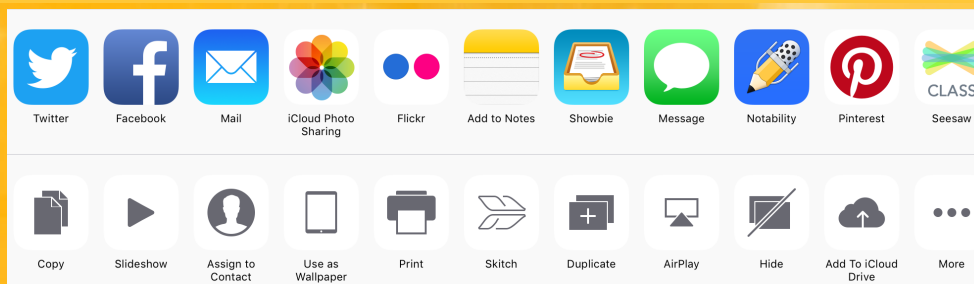




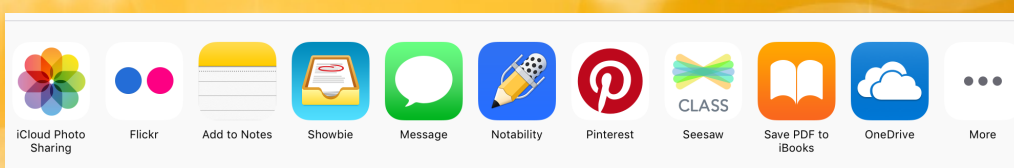
**Step 5:** Now open up your photo album and select the file/s that you want to upload (videos/photos)



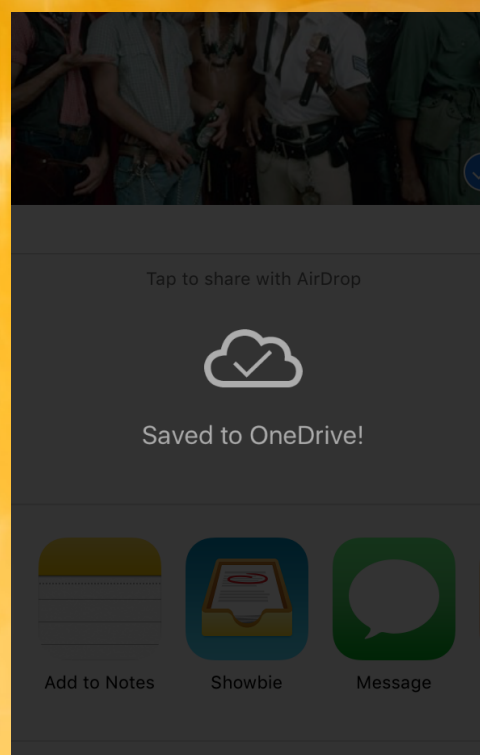
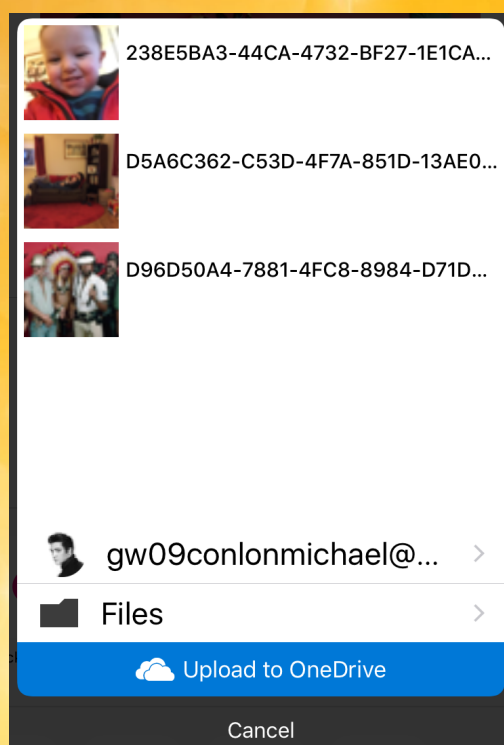
**Step 6:** Below the files you have selected you'll see which apps you can open the file up with



**Step 7:** Swipe through this list to see the OneDrive icon and open it up (If OneDrive does not appear in the list then click on the three dots above the word "More" and switch it on)



**Step 8:** You'll see the files you want to upload and the account you're loading it up into. If you want it to appear inside a folder you currently have you'll need to select Files and choose the folder you want it to go into. Then click on **Upload to OneDrive**



**Step 9:** And that should be you. If you open up OneDrive on your iPad or indeed on your PC/MAC you should now be able to see those files. If you can, then that means you can take it off your iPad knowing that you have the evidence stored in the cloud. One good tip is to create folders in your OneDrive so that you put pupil evidence in the right place for finding later, just in the same way you keep your folders organised on the school network...



For a video tutorial on how to upload from your iPad into GLOW and your OneDrive go to

<https://youtu.be/hlVsqsio8wA>

# WE LOVE MICROSOFT FORMS

And what's not to love.? A free, simple to use tool in GLOW that lets you

- \* Setup quizzes and surveys quickly and easily
- \* Automatically grade quizzes when they are submitted
- \* Give pupils real-time feedback and immediate results
- \* Share with parents, pupils and staff easily

Forms give you five different options for each one of the questions you wish to add. If you're doing a survey then you'll likely use things like Choice, Text and Rating. If you're doing a quiz with pupils then its more likely to be things like Quiz and Text. You can add images to any of the questions too.



When you setup a multiple choice question in a quiz you can indicate how many marks the question is worth, indicate which is the correct answer and also add a comment for each of the selections so that you can give feedback or praise depending on whether they get the questions correct or not!

When you share the form with a class and they fill it in and submit it to you, it will automatically be marked for you and the results also given to the pupil.

Obviously tools like this will have some impact on your own workflow and perhaps workload, as pupils can complete it at any time they wish on any device that has a browser - there is no need for you to devote time to marking. You can instead get on with spotting where the gaps in learning are and planning what's next.

2. What is evaporation all about?

- ☐ It's like condensed milk
- ☐ No , although there is evaporated milk that I've heard of
- ☒ Its when heat turn the water into gas ✓ Correct answer
- ☐ It's a Finnish band

Good as they are that's not the right answer

+ Add option

Points: 1 ☐ Multiple answers ☐ Required ...

Copy and paste the link  
<https://forms.office.com/Pages/ResponsePage.aspx?id=...> Copy

Email the link

Download and send the QR code

Once your form is setup you can then share it with people using a link that is generated for you. You can share it with just pupils and staff within GLOW or make it open for anyone in the world to fill in.

1. Overall, how would you rate the morning?

|           |    |
|-----------|----|
| Excellent | 25 |
| Good      | 10 |
| Fair      | 0  |
| Poor      | 0  |



For some more detail about Forms go to <https://youtu.be/hL-PfIVYb68>

You can view responses collectively or individually



# Everything you wanted to know about iPad in PKC \*

How do I buy them?

iPads are purchased via pecos through IT who'll give you a price that includes a case, etching and the key apps for getting started.



How do I get apps on them

You can download free apps from the app store as normal. Paid apps can be purchased using PECOS, with IT as the supplier who will let you know when you can download.

What size and spec can I buy?

There is a range of specs you can find out in the XMA catalogue you can get from IT, but best not to go for anything less than 32Gb (catalogue price doesn't include case and apps remember).

What about In-App purchases?

You can purchase an iTunes card and attach the funds to your school account. Just make sure no-one downloads a paid app from the normal store without IT permission.

**Top Tip!**

"Guided Access" locks the iPad for younger pupils so that it stays within one app and they can't come out of it until you put in a passcode. You can even put a timer on how long they can use it. Find it in Accessibility Settings.

How do I get more iPads in my school!

New annual computer allocation rules have been changed so there is no limit on computers you can swap for iPads during the refresh - but think carefully!!

\* but were afraid to ask...





Schools in the cloud

"I used to teach people how to write computer programs in New Delhi, 14 years ago. And right next to where I used to work, there was a slum. And I used to think, how on Earth are those kids ever going to learn to write computer programs? Or should they not? At the same time, we also had lots of parents, rich people, who had computers, and who used to tell me, "You know, my son, I think he's gifted, because he does wonderful things with computers. And my daughter -- oh, surely she is extra-intelligent." And so on. So I suddenly figured that, how come all the rich people are having these extraordinarily gifted children? What did the poor do wrong? I made a hole in the boundary wall of the slum next to my office, and stuck a computer inside it just to see what would happen if I gave a computer to children who never would have one, didn't know any English, didn't know what the Internet was.

And I said, "Yeah, it's, I don't know."

I said, "Just like that."

And I went away. About eight hours later, we found them browsing and teaching each other how to browse. So I said, "Well that's impossible, because -- How is it possible? They don't know anything."

So I said, "Yeah, that's possible."

A group of children are gathered around a red display case, looking at the items inside. The case is open, revealing various small objects and documents. The children are of different ages and are all looking intently at the display. The background shows a brick wall and a doorway.

When they saw me, they said, "We want a faster processor and a better mouse."

And they said something very interesting to me. In an irritated voice, they said, "You've given us a machine that works only in English, so we had to teach ourselves English in order to use it." That's the first time, as a teacher, that I had heard the word "teach ourselves" said so casually.

But I was curious to know, what else would they do if they could do this much? I decided I would destroy my own argument by creating an absurd proposition. I made a hypothesis: can Tamil-speaking children in a village learn the biotechnology of DNA replication in English from a streetside computer? And I said, I'll measure them. If I'll leave it for a couple of months, I'll go back, they'll get zero. I'll go back to the lab and say, we





You don't actually need to know anything, you can find out at the point when you need to know it. It's the teachers job to point young minds towards the right kind of question, a teacher doesn't need to give any answers because answers are everywhere.

— Sugata Mitra —

AZ QUOTES

school. I have no idea what they're doing under that tree all day long. I can't help you."

I said, "I'll tell you what. Use the method of the grandmother."

So she says, "What's that?"

I said, "Stand behind them. Whenever they do anything, you just say, 'Well, wow, I mean, how did you do that? What's the next page? Gosh, when I was your age, I could have never done that.' You know what grannies do."

need teachers. So, I put in Hole in the Wall computers there, downloaded all kinds of stuff from the Internet about DNA replication, most of which I didn't understand.

The children came rushing, said, "What's all this?"

So I said, "It's very topical, very important. But it's all in English."

So they said, "How can we understand such big English words and diagrams and chemistry?"

I said, "I haven't the foggiest idea." "And anyway, I am going away."

So I left them for a couple of months. They'd got a zero. I gave them a test. I came back after two months and the children trooped in and said, "We've understood nothing."

So I said, "Well, what did I expect?" So I said, "Okay, but how long did it take you before you decided that you can't understand anything?"

So they said, "We haven't given up. We look at it every single day."

So I said, "What? You don't understand these screens and you keep staring at it for two months? What for?"

So a little girl raised her hand, and she says to me in broken Tamil and English, she said, "Well, apart from the fact that improper replication of the DNA molecule causes disease, we haven't understood anything else."

So I tested them. I got an educational impossibility, zero to 30 percent in two months in the tropical heat with a computer under the tree in a language they didn't know doing something that's a decade ahead of their time. Absurd. But I had to follow the Victorian norm. Thirty percent is a fail. How do I get them to pass? I have to get them 20 more marks. I couldn't find a teacher. What I did find was a friend that they had, a 22-year-old girl who was an accountant and she played with them all the time.

So I asked this girl, "Can you help them?"

So she says, "Absolutely not. I didn't have science in

So she did that for two more months. The scores jumped to 50 percent. They had caught up with my control school in New Delhi, a rich private school with a trained biotechnology teacher. When I saw that graph I knew there is a way to level the playing field.

So what are jobs going to be like? Well, we know what they're like today. What's learning going to be like? We know what it's like today, children pouring over with their mobile phones on the one hand and then reluctantly going to school to pick up their books with their other hand.

What will it be tomorrow? Could it be that we don't need to go to school at all? Could it be that, at the point in time when you need to know something, you can find out in two minutes? Encouragement seems to be the key. If you look at all of the experiments that I did, it was simply saying, "Wow," saluting learning.

I came back to England. I put out notices in papers saying, if you are a British grandmother, if you have broadband and a web camera, can you give me one hour of your time per week for free? I got 200 in the first two weeks. I know more British grandmothers than anyone in the universe. They're called the Granny Cloud. If there's a child in trouble, we beam a Gran. She goes on over Skype and she sorts things out. The teacher sets the process in motion and then she stands back in awe and watches as learning happens. I think that's what all this is pointing at.

Learning environments. They are basically broadband, collaboration and encouragement put together. I've tried this in many, many schools.

It's been tried all over the world, and teachers sort of stand back and say, "It just happens by itself?"

And I said, "Yeah, it happens by itself." "

**For the full TED talk, head to**

<http://bit.ly/1Qal9yE>





Have an amazing Christmas, HO HO HO and all that to  
you and yours

Please visit the blog, follow twitter and share with us your digital  
learning experiences. Find out about upcoming CPD and events about  
GLOW

<https://blogs.glowscotland.org.uk/pk/digitalpkc/>

Join the Yammer group by searching in Yammer for

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