New Technology is Common New Thinking is Rare

The iPad project you are reading about today has been some time in the making. More than three years ago, a small group of teachers at EIC first sat down and suggested the use of laptops and iPads in the classroom. We were well aware that other schools were trying to make this leap, but we were also well aware of the mistakes they were making. We saw many examples around the world where schools had decided that students needed the latest laptop or tablet to enhance their learning, and only when the students had the technology in their hands did the schools actually start to think about how they would use it. A lot of schools wanted to be first, but unfortunately, as is often the way with technology, they were confusing 'first' with 'best'.

Small Beginnings

Our project has taken some time to germinate, as we believed it was important to establish why the iPads would be of benefit, and how to employ them in a way that would realistically enhance the students' learning. If there was no real benefit, then there would be no purpose in pursuing it. We believed we knew where the benefits were, and the pilot program last year rapidly confirmed our beliefs and proved that iPads were the decisive way forward. We are teaching students in the internet age; we must be teaching tomorrow's skills today. Using the iPads in class makes students think creatively and laterally, makes them collaborate, research and share knowledge in a way that simply cannot be done with a pen and paper. We are teachers of students rather than teachers of a subject, and this is where the iPads really flourish. Through the combination of teacher and technology, they can develop the collaborative interpersonal skills so desirable in the workplace, and at the same time become proficient in

> "The 'old school' methods and new technology must happily coexist for students to receive the best possible education"

technical skills that will be an expectation in the workplace of the future.

Interactive Textbooks

However, technology must be used selectively to be used effectively. I personally have been a strong advocate of the iPad program. The Maths department was one of the pilot departments in the project last year. We have invested heavily in online resources which the students love utilising, and have spent more than two years writing interactive textbooks for the students to use. And yet I actively choose not to use this technology in a number of my lessons. Why is this?

No Substitute for Teachers

We must never forget that educational software and technology, like a textbook, is only one tool in the learning process. Neither can ever be a substitute for well trained, knowledgeable teachers, strong leadership and parental involvement. Education is a very personal, very human endeavour, where the relationship between student and teacher is the pivotal point for success. The working world means that technology now has an essential place in education, yet at the highest level there is no supplement for the imagination of the teacher; the way they inspire, motivate, guide and nurture the student through their A level course. It is for this reason we use the technology at our disposal selectively, embracing it wholeheartedly in the arenas where it is an instant benefit on student learning, yet also being strong enough to avoid it in cases where it could make life easier, but not offer any educational advantage.

'Old' and 'New'

It is clear that the iPads have a place in the school: a hugely exciting, dynamic and beneficial place from which students will benefit not just in their school years, but in their working life beyond. However, it is equally important that the teachers take a risk: to be brave enough to use the iPads in a scenario where the students might know how to use it better, to be willing to learn from one another, and be bold enough to discount it when they believe there is a better way forward. The 'old school' methods and new technology must happily coexist for students to receive the best possible education, and it is down to the skill of the teacher to select the best approach for the task at hand. After all, the hunter who chases two rabbits will catch neither.

Pete Willis

Classflow – Humanities Department

This term as part of EIC Year of Technology we have been using Classflow with students in Key Stage 3. This tool helped lessons to be truly interactive and has enabled teachers to gain instant feedback on students' understanding and progress. Students can interact through their iPads to vote, comment or create responses to lesson ideas, which in turn has allowed the teachers to deliver more meaningful lessons. The tool has been used in a range of subjects across Primary and Secondary areas and in the Humanities Department I have seen some excellent lessons using Classflow during the teaching of Historical Sources and Mapskills. We have also used the tool during the recent Humanities Day which allowed the students to practise, send in and vote on who had perfected the art of writing Chinese characters.

EIC has maintained close contact with the developer of the tool and as a pilot school for Classflow they have appreciated the comments and evaluation that both staff and students have given.

Chris Long

The MFL Department

Since the iPad pilot was launched last year, the MFL department can proudly say that it embraced the technological move and has fully integrated the use of a range of applications in order to foster collaborative learning.

The popular *Edmodo* platform enables pupils and teachers to be connected at all times, posting comments, tasks and assignments. The Languages Department also has an active Twitter account and this year we have put even more focus on this tool by encouraging Year 9 pupils working towards the MFL Star Award to publish tweets in Spanish, French or German each week.

Flipgrid, Storybird, Socrative, Linguascope, Educreations are a few examples of the several applications used in MFL lessons in order to support and further encourage learning. *ClassFlow*, the website which enables teachers to plan interactive lessons and connect pupils to get instant feedback, has also proved to be a huge success. Furthermore, pupils continue to be very excited and competitive when *Kahoot,* a game-based digital pedagogy, is incorporated in lessons.

All MFL teachers have noticed an increase in motivation when the iPad is used and this device has become such a great asset to our lessons that it would be challenging to have to do without it. However, it is important to stress that the iPad is used to support learning, but the MFL department continues to develop the traditional way of writing and completing work because, quite simply, for some activities, pen and paper are just as efficient. As with many things in life, it is all about finding the right balance!

Anne Rienzi

iPads in the Maths Department

'Give the pupils something to do, not something to learn; and the doing is of such a nature as to demand thinking; learning naturally results.' - John Dewy *(American philosopher, psychologist, and educational reformer)*

I love to see the excitement on the children's faces when we use the iPads to do *Kahoot* quizzes, create their own lessons to teach to the class or work through exercises on *MyiMaths,* getting instant feedback.

It is also common for me to see a child struggle with the traditional approach to teaching mathematics but come alive when technology is thrown into the mix.

For them it is rewarding when they complete homework successfully on a topic where a big component of technology is used in the teaching. Quite often learning takes place without the children even knowing.

This new technology will not replace our traditional teaching methods but will enhance and improve the learning experience of mathematics for our children. An added bonus is that, by default, they gain skills in using technology in any topic.

What the children say:
'Makes Maths funner'
'More fun and easier to learn with'
'Doing as much work without knowing'

Annette Scott
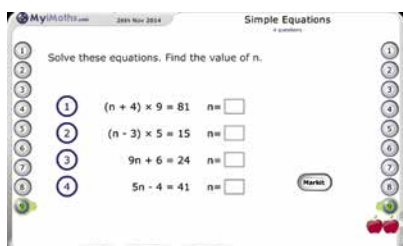
> "The iPads allow students to access the curriculum in an entirely new and individual way."
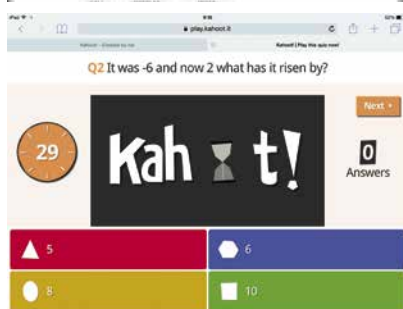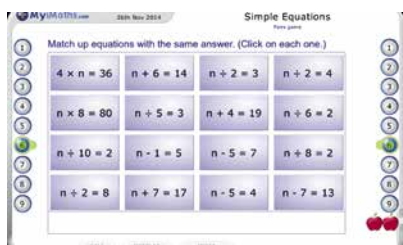
Innovation distinguishes between a leader and a follower. At EIC we have always seen ourselves as leaders in education, and there is no doubt that the iPad program has been the biggest innovation of recent times.

The iPads allow students to access the curriculum in an entirely new and individual way. Our in-house textbooks for Key Stage 3, written exclusively by EIC staff, are perhaps the most obvious change, but this is simply the tip of the iceberg. Built into the textbook are specific links to the myimaths website. Students are suddenly able to research new concepts immediately and personally; they can record and present their work in a huge variety of ways and, perhaps most importantly, they are able to collate, process and display their work in a way more representative of the workplace they will soon be moving on to.

The iPad program may have its origins in the secondary school, but it has certainly not stayed there. This time last year, we had just introduced our iPad pilot program to Year 8. One year on, all of Key Stage 3 are using iPads on a daily basis, and resources like the aforementioned myimaths site are now being used from Year 11 right down through the Primary school, creating an easy marriage between technology and education in the classroom.

But what do the students think? Well, a quick survey of both primary and secondary students yielded the following responses:
"It lets you work faster and it makes you want to learn how to do it."
"It is so much fun that I forget that it is educational as well."
"If you are waiting round for the teacher you can be tempted to talk, but with myimaths you only want to talk about maths."
"You choose the level that suits you."

What more do you need to say? Core to our department philosophy is that maths should be a 'fun' activity; the variety that the iPads have brought to the classroom simply serves to fulfil this vision. The progress in the last twelve months has been startling. Just imagine where we will be twelve months from now.
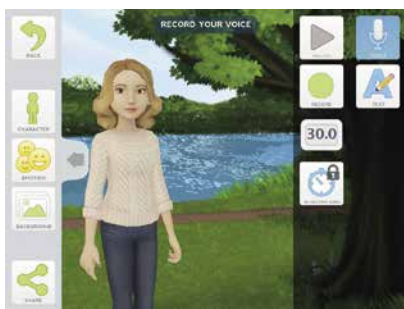
Mr Rob, Miss Kaye and Mr Willis

Year 3 English Lessons

In Year 3 we have been using the iPads in English lessons to inspire us to create amazing writing. After developing speeches, we can now produce weather or news reports on iMovie that look so realistic that we feel as if we are on television. We can write information texts and then record informative videos using apps like Tellagami. Our play scripts can now be brought to life with Puppet Pals. Morfo encourages us to think more about emotions, so that our diary writing becomes more vivid. Developing interactive books on Book Creator helps us to think about how best to structure our story writing. One recent highlight was using Stop Animation to create animated firework videos with our simile Bonfire Night poems narrated over the images.

These apps are all free, and are being used across the curriculum in a number of inventive ways to bring learning to life. For Year 3, these new lessons have really boosted speaking and listening skills. Better speaking and listening leads to better writing, and the students are more motivated to write than ever before. We are able to share more of the children's amazing work with their families, because we can upload it to Edmodo, which is another motivating factor. We are using new technology to develop traditional skills, and the results so far have been very exciting.

Miss Laura

Video Assessment

Recently in Year 2 we were reading and responding to the story ´Sharing a Shell´, by Julia Donaldson. We studied key story events, characters and themes in the text. As always, we utilised drama as a learning tool. The children created stick puppets and as a group retold the story in front of a camera in the style of a theatre.

The children were directed to work in groups and play a role from the story. The children did find this challenging at first and often wanted to change roles. However when the time came to perform, the children were established in their role and had rehearsed.

Each group performed in front of the camera where the children and I offered feedback to each group as they performed. In the follow up English lesson I showed children the video clips of their performances. After the class had calmed down from seeing themselves,´on screen´ the children were quite surprised at what they saw and could straight away identify mistakes and things they need to improve on for the future. The camera was a great success and worked well not only for my assessment of the children, but for self assessment. As a year group we are now planning on using the cameras not just for teachers to film the children but for the children to film themselves and direct their own learning, not just in English and Drama, but in Science and Maths. E xciting things to come!

Miss Nichola

Last year saw the trialling of the *2Simple - 2Build a Profile* app. The Early Years and Reception classes have benefitted hugely from this award-winning app which provides a simple and powerful way to log children's achievements in a few simple steps. Equally, it provides teachers with a formative assessment tool that links up to the EYFS Curriculum. After last year's trial, the app is now being fully used across our Foundation Stage and our staff are delighted with the benefits to the children and teachers alike. In summary, we open the app and select the child that is being observed and take a photo with the device's camera. We write a virtual post it note, tag the observation with the learning objective and then send it via wifi to a secure website where it is collated in each child's portfolio. Teachers use this information to track each child's development and inform future planning and we have also started sending the portfolios to parents so that chidren's achievements can be celebrated at home. "It is always simple that produces marvellous" and the 2Simple app is proof of that!

Sarah Lucas