IPACA pushes the boundaries of 21st century learning with Google Apps and Chromebooks

At a Glance

What they wanted to do

- Introduce one-to-one access to digital tools to inspire students and maximise their use of collaborative suite Google Apps
- Find a suite of digital tools designed to boost productivity amongst students and staff
- Enable students to learn anywhere, anytime

What they did

- Adopted Google Apps and purchased 840 Google Chromebooks

What they accomplished

- Helped speed up children's learning process, providing more opportunities for independent learning
- Helped children work successfully and constructively in groups, supporting each other across age ranges and abilities
- Enabled discussions with worldwide experts, increasing students exposure to different cultures and viewpoints
- Saved approximately £5000 through not replacing or upgrading Exchange server, which is no longer needed

Background

IPACA, (Isle of Portland Aldridge Community Academy), is a non-selective, non-fee paying, co-educational state school for students aged 3-16. It plans to expand its intake to include students aged 2-18. It opened in September 2012, bringing together five existing schools, and is located across four campuses.

The academy takes a stage not age approach to education, meaning younger children learn in groups according to their stage of development, rather than their age. IPACA has excellent academic results for the Isle of Portland and is the most improved local school.

Challenge

IPACA's patron is visionary educationist Professor Stephen Heppell, who is recognised internationally as a leader in the fields of learning and technology with a long track record of successful projects. Stephen chairs the Government's Educational Technology Action Group. IPACA embraces Professor Heppell's thinking and the academy therefore takes a progressive approach to technology, aiming to engage children in digital learning from the day they join.

IPACA wanted to offer its students access to online technology for learning at all times. It also wanted to provide them with a personal email account and laptop or tablet so they could engage with one another and teachers electronically, as well as in-person.

A barrier to this was the legacy IT systems from the previously separate five schools. When they merged, the exchange server struggled with the hundreds of new accounts.

A further barrier was a lack of devices in the classrooms. Other than a few standalone devices in shared spaces like the library and two ICT suites, students couldn't access online resources.

The Academy's Director of Digital Learning and Innovation, Gary Spracklen, explains, "We needed to completely transform our technology and give each student a device so they could access the learning resources they needed at any time."

Solution

To address these challenges, the IT team chose Google Apps for Education, the free collaboration and communication suite hosted online. As there's no licence payments or in-house data storage requirements, they were able to ensure every pupil and staff member had a Google Apps account, and hence a Gmail address, within the first two months of the academy opening.

"If we'd upgraded our Exchange Server to cope with the demands for staff email access we would have been looking at costs of about £5,000 over three years, including training and running costs," explains Spracklen. "Instead, through Google Apps, we now have a whole suite of collaborative tools, including video, instant messaging and online site creation for free. Plus there's no need for internal hardware maintenance and licence management needed for on-premise options."
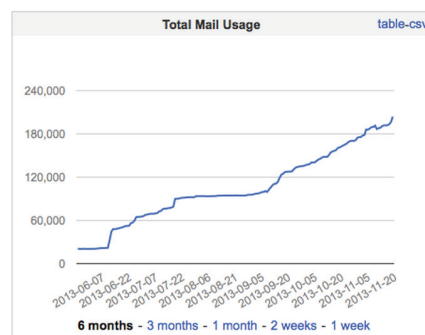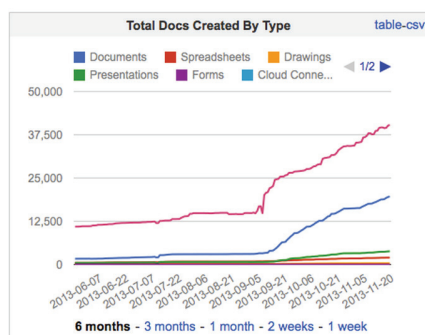
To address in-classroom technology access, Spracklen and his team considered purchasing a range of devices including iPad, iPad Mini and Netbooks, before choosing Google Chromebooks. They offer an affordable way for students to learn through the web, providing simple, quick access to all the features within Google Apps. The school is keen not to become dependent on any particular learning software, which can become quickly outdated. It believes the web offers the best portal for a constant stream of the latest learning materials – this matches the Chromebooks' browser-based approach perfectly. The academy now has 840 Chromebooks – enough for all students in the secondary phase of their education and staff to have their own device.

"We chose Chromebooks because they are easy to manage (unlike iOS devices), cost-effective and promote the BAB (Bring a Browser) ethos that we want to foster in our learners. They are also hard-wearing enough to handle day-to-day use in a school environment, easy to use and quick to start up," explains Spracklen.

The devices were introduced with a **clear set of guidelines** to help students understand how and when to use them.

Benefits

Chromebooks have had a huge impact. A key element of their popularity has been the ease at which students can now access the full suite of tools in Google Apps, from Sites to Docs and Gmail. Offering such a broad range of communication options has fuelled the sheer volume of content they are now producing and helped to accelerate the students' pace of learning through more intensive collaboration with their peers and better engagement levels. Usage figures for Google Apps since Chromebooks have been introduced have risen steadily after only one term:

Chromebooks are even proving their worth in the teaching of non-traditional subjects. Because they are lightweight and portable, they can be used in dance classes, for example. Having access to the internet means students can research other dances to inspire them. This makes students' digital logbooks of activity – which are created in Google Docs – much richer.

The use of Chromebooks and Google Apps has helped speed up progress in lessons. Now students can perform, film, review and make improvements to their dance within the space of a lesson; all with the help of the teacher, who has shared access to their Docs. The fact that the class is now learning two dances this term, rather than one, is proof of this faster progress.

"Children can progress more quickly now, as everything is more instantaneous with Google Apps and Chromebooks. I can be commenting on a student's Doc during the class so they can improve the work as they go, rather than waiting to receive it back after marking the next week," says Angela Williams, Head of Dance and Director of Performance for IPACA.

With mixed-age tutor groups, students are encouraged to help one another in their studies by reviewing and critiquing peers' work. The introduction of shared online Docs, where students can invite peers and teachers to add comments to their work, has helped support this collaborative learning approach. Dance students use a shared spreadsheet to collate comments on one another, and work together to come up with their next personal development goals, for example.

"What impressed me most was, in asking the students last week about the best new aspect of their learning, they replied "that we are proud to be here". That is an impressive answer. Their technology is embedded, effective and just plain normal now, but the students' pride and ambition is palpable. That is what happens when we get technology right".
—*Professor Stephen Heppell, Patron, IPACA*

Providing a constant stream of feedback for each student is another important aspect of IPACA's use of Google Apps. Now, instead of handwritten feedback on paper-based homework, teachers can engage with students through a variety of ways. Options include audio clips about their students' work and real-time comments within Docs, which can be quickly addressed during the class.

About Google Apps for Education

Over 30 million students, faculty, and staff use Google Apps for Education worldwide. Google Apps is a free suite of hosted email and collaboration applications exclusively for schools and universities. You can learn more and sign up to try it out by visiting our website:

www.google.co.uk/a/edu

About Google Chromebooks

Chromebooks are fast, portable computers that give students access to the web's rich educational tools & resources. Educators can manage Chromebooks easily from their web-based Admin Console. And starting at just £199 per device including Google Apps for Education for free, these computers make technology affordable for schools. You can learn more here:

www.google.co.uk/intl/en/chrome/ education/devices/

Google Certified Teacher, Lea Spencer, is using Google Forms to quickly assess the progress of his students: "With Forms, I can set homework and progress checks, where data is collected automatically. This saves me time, allowing me to spend more time planning engaging lessons."

He explains how he introduced the technology to the classroom, "I have been building up my students' use of the Chromebooks one week at a time. For each class, I upload and share the lesson with them and they've now got used to this process. By accessing their lessons individually, the students are more involved in their learning, which means they take on more personal responsibility for their progress, rather than simply being led by me."

Year 9 student Kyle Creasy sums up his experience of the technology, "I love using my Chromebook because everything is on the device, so I can check emails, research subjects, collaborate with my friends and other people from around the world and hear instantly from teachers about how I'm getting on with my learning".

The uses of Chromebooks within IPACA has now become a benchmark for what can be achieved through the technology. The school was recently nominated for an 'Education Innovation Award' at the **Education Innovation Conference** for their Chromebook deployment.

Professor Stephen Heppell, has also noted the impact the technology has had on the school: "What impressed me most was, in asking the students last week about the best new aspect of their learning, they replied that "we are proud to be here". That is an impressive answer. Their technology is embedded, effective and just plain normal now, but the students' pride and ambition is palpable. That is what happens when we get technology right".

IPACA's former Principal, Alison Appleyard, concludes, "Innovation and an entrepreneurial attitude are at the heart of our values. By using Chromebooks and Google Apps, we've been able to transform the learning experience for all of our students. This open access to online resources is key to students becoming successful independent learners, empowering them to use resources as they see best and giving them the skills they'll need to be successful in the future."

Google for Education