



Dear Parents/Guardians,

I promised that I would update you as the year goes by on a few of the areas you identified as requiring particular attention from us. This is the first of three such letters this academic year and addresses the area of ICT and computing. Necessarily, I am afraid, it is quite a long letter, but you can pick and choose as you wish of course!

This letter has been put together in conjunction with Dr Albin Wallace, the Director of Digital Learning at the school. If you wish to learn more, please do feel free to [contact him](#).

Best regards,

James Hodgson
Head Master

Background Philosophy

Children today are growing up in a digital world and in many cases, and in some areas, will know rather a lot more about digital technology than their teachers or parents. However, they are still young and they need to learn how to navigate that world through an often fragile period in their own personal development; furthermore, they will enter an adult world where the power of technology will be as great as humankind's imagination – which will provide both technical *and* ethical challenges for them to negotiate. Our education in computing, therefore, must face up to and address both of these challenges so that they can leave school well-prepared for university and the world of work. In alignment with our school values, we wish boys to be curious and to be allowed to run with their passions; this requires us to be able to provide outlets for exploration in a safe environment, and also to be constantly scanning the use of current emergent technologies ourselves to target carefully the use of those technologies to your boys' best advantage. We will be doing this through an 'innovation committee', to which all staff can apply for innovation-based funding through its Chair, the Director of Digital Learning.

The Current Situation

Infrastructure

We are fortunate that the technical infrastructure of the school is excellent, providing highly reliable and future-proofed access to all systems for boys and staff. The wireless network provides effective connectivity for both fixed and mobile devices in the main school, and we have plans to further improve (an already improved) provision in the boarding houses.

Platforms

The Prep School introduces the use of GoogleDocs at an early age, with boys increasingly using the Microsoft Office 365 suite in the Upper School. By the time boys reach Sixth Form, the idea is that they will have experienced the use of a number of systems appropriate to their stage of development, including those used in the business world and at universities.

Teaching

Departments within the Upper School implement their digital technologies according to their individual needs, relevance to lessons, skills and teaching styles. There is deliberate diversity, with apps such as Kahoot, Memrise, GCSEPod and Firefly used across the school. Within the Prep School, boys are given the opportunity to use iPads and Chromebooks for both individual and collaborative learning, including research and writing tasks. Their work is stored on GoogleDocs, which is used effectively

for the preparation of resources, storage of boys' work and general tracking, and classroom teaching. Interactive whiteboards are used extensively with teachers and pupils enjoying use of the boards. We are keen for boys and teachers to use a range of mobile devices in the lower end of the school. Boys easily adapt their experience with GoogleDocs in the Prep School to Microsoft Office 365 in the Upper School, and they engage in an exciting range of Computer Science activities from Year 5 onwards, including robotics, electronics and coding.

Within individual departments, Firefly is used for setting, marking and giving feedback on prep and, when appropriate, teachers use a range of mobile apps for revision and quizzes.

The library provides an impressively wide range of online services. As well as the library catalogue, a large number of resources are available, including revision guides and a suite of Britannica services. The library portal is also a repository for digital media such as ClickView, GCSEPod, Massolit and Digital Theatre. Periodicals, news feeds and subject resources are also available through the portal. Curation of digitised content and apps are being further strengthened with the support of existing information specialists, and digital learning will focus on the existing and future needs of departments and the pupils and teachers within them. This will be structured and resourced through the innovation-bid model.

Exciting Recent and Imminent Initiatives

Boys have the opportunity to engage their curiosity in Sport, the Creative Arts and other subjects, and we are committed to giving the same opportunities in digital spaces. The Digital Leaders Programme, Online Ambassadors Programme and the Cyber Discovery Programme are all new initiatives we have introduced into the school this academic year, and we are pleased that a significant numbers of boys are starting to take advantage of them.

The new Director of Digital Learning is leading on many of these projects and he is keen to see boys developing their initiative in the use of digital technologies. There is, for instance, a HackLab being built by one of the pupils who is a Digital Leader, and innovative learning software is being developed by another pupil. We have established a Digital Learning Forum that provides the opportunity for both staff and boys to have input into future initiatives, and are actively promoting and supporting the use of digital technologies, resulting in some exciting innovative use of IT within various departments: the use of virtual reality simulations in science is already one such example.

Computer Science is an important growth area in the school. Programming is an important skill and one that is useful in the development of computational thinking. In addition, having an understanding of computer programming languages develops the boys' skills in logic and abstraction as well as mathematical and linguistic skills. Over 40 boys have taken the opportunity to study a Computing GCSE for the first time this year; others are encouraged to join in with coding through the coding club, or holiday courses, outside this time.

We launched the Cyber Discovery programme during November last term, with over 30 boys enthusiastically taking up the challenge. The programme is an extracurricular programme for pupils aged 14-18 across the UK, and is an excellent programme for developing skills in logic, mathematics, computer science and cyber security. Top participants across the UK are invited to move up through various stages, with the most elite in the country eventually being invited to a cyber-security camp in the summer.

We are also excited to be offering the Duke of York Inspiring Digital Enterprise Award (iDEA), beginning this term. iDEA is a programme that helps pupils develop digital, enterprise and employability skills. Through a series of online challenges and events, pupils can win career-enhancing badges, unlock

new opportunities and, ultimately, gain industry-recognised awards that help them stand out from the crowd. iDEA is for any boy at Bedford School who wants to develop his digital skills. As with the Duke of Edinburgh Award, it is offered at Bronze, Silver and Gold level. Certificates are issued from Buckingham Palace, with the Palace's embossed seal. More information will be available in the coming weeks.

Online Safety

The school's strategic vision is built around the four values of integrity, responsibility, endeavour and curiosity; and these are all integral also to our approach to digital technologies.

The issue of online safety is addressed through the Upper School termly Citizenship mornings and through PSHE provision in the Prep School. Safer Internet Day takes place every year and Bedford School will continue to be an enthusiastic advocate of this, ensuring that pupils and teachers are aware of issues, and can take active steps towards becoming better, safer users of digital technologies. The Google Legends programme will be introduced in the Prep School to enhance the existing online safety programme. In the Upper School, boys will enrol in and complete the online safety badges that make up the Bronze component of the Duke of York Inspiring Digital Enterprise Award. Specifically, the badges cover social media ethics, online safety, cyber security, digital ethics and GDPR, amongst others. Our new Online Ambassadors programme will also provide peer support for fellow pupils with our Citizenship Mornings being used to provide skills and knowledge in staying safer online.

Long Term Strategic Aims

In practical terms, the school's leadership talks about cutting edge, rather than bleeding edge, when it speaks of our approach to ICT. Many schools have wasted a lot of money on ventures which have not stood the test of time; we would prefer to learn from the mistakes of others. We wish to infuse technology seamlessly into all we do so that boys leave school comfortable on a range of platforms.

The school is aspirational with regards to the future development of IT and digital learning. The approach is one that encourages innovation and creativity, yet keeps boys safe and is underpinned by the school's four core values. It will aim to give all boys the fundamental skills they will need to enter an adult world, whilst enabling those who are particularly keen on IT the opportunity to thrive. A focal point of IT within the school will be the formalisation of creative digital media hubs, where the very best in digital sound, light, art, music and design will be created and showcased. We are already well-advanced in our progress with Music (and indeed Music Technology has already been an A-Level option for a number of years) and Drama.

Undoubtedly, this is an exciting area for development in the coming years – and (as with all other areas of school life) we would always be delighted to hear from you if you have suggestions, observations, or comments.