Computing

Computing Curriculum Intent

At BTAM, we facilitate a challenging and exiting Computing curriculum and aim to develop skills in our pupils which will equip them for learning and work in the modern world. We educate our pupils on how to use technology positively, responsibly, and safely and provide them with a strong foundation in the areas of Computer Science, Information Technology and Digital Literacy.

We want to equip pupils to use computational thinking and creativity that will enable them to become active participants in the digital world. It is important to us that our pupils understand how to use the ever-changing technology to express themselves, as tools for learning and to move forward into a more digital future.

Whilst ensuring pupils understand the advantages and disadvantages associated with online experiences, we want pupils to develop as respectful, responsible, and confident users of technology who are aware of measures that can be taken to keep themselves and others safe online.

Our aim is to provide a Computing curriculum that is designed to balance acquiring a broad and deep knowledge, alongside opportunities to apply skills in various digital contexts.

Implementation

Pupils experience weekly discreet Computing lessons either using the Computer Suite or in class using iPads to fully engage with practical skills. Outside of our Computing lessons, we actively promote the use of technology throughout the school to enhance the curriculum and create modern, ambitious learning experiences so that pupils can implement their learnt skills in other contexts.

Our Computing lessons cover the three predominant areas of Computing, these include Computer Science, Information Technology and Digital Literacy. Computer Science involves using coding and programming, for example, the skills used in exploring mazes progress on to creating games and then testing them out and fixing errors (debugging). Information Technology involves animating storyboards, these skills then progress on to making music, animations and even 3D modelling. Digital Literacy involves having a secure understanding of online safety, how to use search engines effectively and the safe use of emails.

In the Early Years, pupils will explore and be taught to use technology across the curriculum in a purposeful way which will impact positively on their learning and development. We have developed our own early computer skills programme (The BTAM Computer Passport) to introduce technology. Pupils then progress on to Mini Mash where they will begin to explore and interact with different programmes before pupils are ready to progress on to the Year 1 Purple Mash Curriculum.

We use Purple Mash to enable a safe, effective, and appropriate computing curriculum. This resource enables access to programmes which are appropriate to the pupils' levels of

development and are progressive. For example, when coding, pupils will progress through the Chimp level for beginner coders where the objects and commands are at a basic level. The Gibbon level provides pupils with additional objects they can manipulate or add to their designs as well as additional commands for more control. Gorilla level is the highest level, which provides even more choice to adapt and enhance the look and functions of the programme with the most sophisticated level of control.

Most programmes that pupils access are through the 2Simple website where each pupil has their own account so that they can save their work and progress and complete projects over time. Through the upper key stages, this does extend to using Microsoft Word, Excel, and PowerPoint to prepare pupils for the programmes they are likely to encounter beyond primary school.

Online safety is taught across the school throughout the year, and we ensure that this is consistently embedded so that our pupils know how to keep themselves safe online in different scenarios. Though our pupils are too young to be using social media, we understand the role that this form of communication will no doubt play in their homes and future lives. We understand that the best prevention for many of the issues seen with social media today, is education and so this plays a key role in the teaching of online safety. We also ensure that our core vales of DECIDE are implemented within our Computing curriculum and we promote our pupils to be good citizens online too by promoting the message of Decisions and Community.

As a school, we have a strong commitment to Internet Safety and regularly celebrate Internet Safety Day with a host of activities across the school - ensuring that pupils know exactly what to do if they have concerns about any content or contact on the internet. With an exploration of online bullying, and the harm that it can cause, we prepare pupils and instil an understanding for the need to be kind and respectful online.

The quality of our computing curriculum will be monitored through termly pupil voice, learning walks, work scrutiny and skills audits. Regular CPD will ensure that all staff are confident in delivering the most up-to-date pedagogical approaches to supporting this area of the curriculum to keep the subject relevant, challenging, and exciting. This subject is also overseen by our Designated Safeguarding Lead (DSL) to ensure we are doing everything possible as a school to keep our pupils safe online.

The progression of skills can be seen by clicking here.

The units covered each year can be seen by clicking here, although as we align our curriculum and respond to pupil voice, these modules will be facilitated in an order which best responds to and meets the needs of our pupils and wider curriculum. For the order planned, please see the class curriculum map section.

Intended Impact

Our computing curriculum creates a collaborative environment in which pupils can learn to be creative, express and challenge themselves. Pupils will be assessed throughout their learning within the lesson and formal assessments against the 'I can' statement as we progress through each module. After each unit of work, teachers will make a judgement on whether pupils are emerging,

expected or exceeding the objectives set. This will also provide information for the subject leader to track and monitor achievement and progress and the impact that this curriculum has had.

Evidence of progression and achievement will be seen in examples of pupils' work stored within their Purple Mash account, Purple Mash books and through pre and post module assessment. As a result of effective implementation, pupils will be able to apply their skills and knowledge in other areas of learning. Pupils will be able to share their knowledge of how to be a responsible user of technology through discussion when questioned. They will be prepared for the next stage in their lives, knowing how to be a responsible user of technology in the wider world and most importantly, know where to seek support. Confidence in this subject will also mean that pupils are able to be more independent and competent in life skills such as problem solving and logical thinking.

Our Computing curriculum will ensure that our pupils have an enthusiastic and confident approach towards the learning and present as competent and adaptable computational thinkers who are able to use identified concepts and approaches across the curriculum. Pupils at BTAM will be able to create and evaluate their own project work while taking on board the comments and views of their peers to be able to make improvements, and in this way demonstrate their collaborative working skills. Pupils will have a secure understanding of the positive applications and specific risks associated with a broad range of digital technology. The learning that pupils undertake at BTAM in their computing lessons will prepare them for the next phase in learning and to be more independent and confident in the way that they access and present information.

How Parents and Carers can support at home

2Simple have put together an informative guide to help support you in enabling your child to grow into a responsible digital citizen who is able to keep themselves safe while, at the same time, getting the very best from the digital world. You can access this guide [here](#).

As well as supporting our Computing, Purple Mash can also be used for a range of exciting learning experiences across the curriculum. Every pupil has their own personal log in and can access this from home. You can access the Purple Mash website [here](#) and use the login details sent home with your child at the start of the year. Please contact your class teacher if you need this information again.