Welsh House Farm

Computing Policy

2020

Introduction

This policy sets out Welsh House Farm School's aims and strategies for the successful delivery of Computing. This policy should be read in conjunction with other relevant school policies such as the Safeguarding, Equal Opportunities, Curriculum, Finance, Teaching & Learning, SEND and Assessment policies. Guidance from consultants and pupil and staff voice questionnaires have shaped and will continue to help shape this policy. This policy is based on government recommended/statutory programmes of study. Due to the fast pace of technology innovation and constantly emerging trends, it is recommended that this policy is reviewed, at the end of every academic year.

Aims

Welsh House Farm School believes that every child should have the right to a curriculum that champions excellence; supporting pupils in achieving to the very best of their abilities. We understand the immense value technology plays not only in supporting the Computing and whole school curriculum but overall in the day-to-day life of our school. We believe that technology can provide: enhanced collaborative learning opportunities; better engagement of pupils; easier access to rich content; support conceptual understanding of new concepts and can support the needs of all our pupils.

Our Aims

- Provide an exciting, rich, relevant and challenging Computing curriculum for all pupils.

- Teach pupils to become responsible, respectful and competent users of data, information and communication technology.

- Provide technology solutions for forging better home and school links.

- Enthuse and equip children with the capability to use technology throughout their lives.

- Teach pupils to understand the importance of governance and legislation regarding how information is used, stored, created, retrieved, shared and manipulated.

- Utilise computational thinking beyond the Computing curriculum.

- Equip pupils with skills, strategies and knowledge that will enable them to reap the benefits of the online world, whilst being able to minimise risk to themselves or others.

- Instil critical thinking, reflective learning and a 'can do' attitude for all our pupils, particularly when engaging with technology and its associated resources.

- Use technology imaginatively and creatively to inspire and engage all pupils, as well as using it to be more efficient in the tasks associated with running an effective school.

Safeguarding: Online Safety

Online safety has a high profile at Welsh House Farm School for all stakeholders. We ensure this profile is maintained and that pupil needs are met by the following:

- A relevant up-to-date online safety curriculum which is progressive from Early Years to the end of Year 6.

- Through our home/school links and communication channels, parents are kept up to date with relevant online safety matters, policies and agreements. They know who to contact at school if they have concerns.

- Data policies which stipulate how we keep confidential information secure.

- A curriculum that is threaded throughout other curriculums and embedded in the day-to-day lives of our pupils.

- Training for staff and governors which is relevant to their needs and ultimately positively impacts on the pupils.

- Our online safety policy (part of our safeguarding policy) clearly states how monitoring of online safety is undertaken and any incidents/infringements to it are dealt with.

- Scheduled pupil voice sessions and learning walks steer changes and inform training needs.

- Filtering and monitoring systems for all our online access provided by Policy Central.

Curriculum

As a school, we have chosen the Purple Mash Computing Scheme of Work from Reception to Year 6. The scheme of work supports our teachers in delivering fun and engaging lessons which help to raise standards and allow all pupils to achieve to their full potential. We are confident that the scheme of work more than adequately meets the national vision for Computing. It provides immense flexibility, strong cross-curricular links and integrates perfectly with the 2Simple Computing Assessment Tool. Furthermore, it gives excellent supporting material for less confident teachers.

Early Years

We aim to provide our pupils with a broad, play-based experience of Computing in a range of contexts. We believe the following:

- Early Years learning environments should feature ICT scenarios based on experience in the real world, such as in roleplay.

- Pupils gain confidence, control and language skills through opportunities to 'paint' on the interactive board/devices or control remotely operated toys.

- Outdoor exploration is an important aspect, supported by ICT toys such as metal detectors, controllable traffic lights and walkie-talkie sets.

- Recording devices can support children to develop their communication skills. This is especially useful for children who have English as an additional language.

Key Stage 1 outcomes

- Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following a sequence of instructions.

- Write and test simple programs.

- Organise, store, manipulate and retrieve data in a range of digital formats.

- Communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.

Key Stage 2 Outcomes

- Design and write programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.

- Describe how Internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; respect individuals and intellectual property; use technology responsibly, securely and safely.

- Use sequence, selection and repetition in programs; work with variables and various forms of input and output; generate appropriate inputs and predicted outputs to test programs.

- Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

- Use logical reasoning to explain how a simple algorithm works and to detect and correct errors in algorithms and programs.

- Understand computer networks including the internet; how they can provide multiple services, such as the worldwide web; and the opportunities they offer for communication and collaboration.

Assessment

- Pupil attainment is assessed using the 2Simple Computing Assessment Tool for Years 1 to 6. The tool enables staff to accurately identify attainment of pupils through the detailed exemplification it has for each key learning intention.

- Teachers keep accurate records of pupil attainment by entering data using the 2Simple Computing Assessment Tool.

- Tracking of attainment by using the 2Simple Computing Assessment Tool is used to inform future planning.

- Children are encouraged to self, peer and group assess work in a positive way using online collaborative tools such as 2Blog in Purple Mash.

- Formative assessment is undertaken each session/interaction in Computing and pupils are very much encouraged to be involved in that process. Through using the progression of skills documents and displays from 2Simple, both teachers and pupils can evaluate progress. Features such as preview and correct in Purple Mash are used to further support feedback and assessment.

- Summative assessment is undertaken in line with the assessment cycle (See Assessment Policy). Using electronic work samples from children's portfolios on Purple Mash, teachers enter judgements about the samples into the 2Simple Computing Assessment Tool.

Inclusion

At Welsh House Farm School, we aim to enable all children to achieve to their full potential. This includes children of all abilities, social and cultural backgrounds, those with disabilities, EAL speakers and SEN statement and non-statemented. We place particular emphasis on the flexibility technology brings to allowing pupils to access learning opportunities, particularly pupils with SEN and disabilities. With this in mind, we will ensure additional access to technology is provided throughout the school day.

Gender and inclusion

At Welsh House Farm we aim to counter the stereotypes often associated with information technology and computing (e.g. that it is a male-only field). Efforts should be made, for example, in the selection of historical or contemporary case studies, to reflect the positive

contributions of female practitioners such as Ada Lovelace, Grace Hopper or Dame Wendy Hall. Project topics should also be carefully considered to appeal to both genders.

Assistive technology

As with other areas of the curriculum, computing can be made more accessible to pupils with special educational needs or disabilities through the use of assistive technology – from adapted mice or keyboards, to screen readers and Braille displays. Within the curriculum, pupils might evaluate whether software and digital content, including those they create themselves, are accessible to users with special needs. At key stage 2, pupils might learn about assistive technology as examples of 'forms of input and output'.

English as an additional language

Technology can also facilitate the inclusion of pupils learning English as an additional language. The user interface of the operating system or application software can be set to languages other than English. Scratch and Snap! programs, for example, can be written in a variety of languages. Machine translation may also be useful for project work in which pupils learn about the opportunities offered by the internet.

Gifted and Talented

For gifted and talented children we can:

- look for ways to enrich pupils' experience of computing rather than accelerating them through the syllabus. The provisional nature of work on computers allows scope for work to be refined and developed.

- provide a range of possibilities for independent learning, perhaps using resources or online communities to provide stimulus or support beyond what our school can offer. We may steer very able pupils towards the best resources, providing critical feedback on their work, or setting further challenges.

- provide, or allow pupils to choose, different sets of tools. For instance, programming tasks accomplished by most pupils in Scratch could be tackled in Logo or Python by particularly advanced pupils, or they might use Adobe Premiere Elements for video editing undertaken in Movie Maker by the rest of the class.

- encourage pupils to think about the algorithms and programs of applications they use is an effective way to develop some aspects of computational thinking, for instance by asking them to predict what will happen when they adopt a particular strategy in a computer game, or to consider how an image file changes when the brightness or colour is adjusted.

Monitoring, Evaluation and Feedback

Monitoring will be achieved by:

- Pupil voice.

- Teacher voice.

- Learning walks.

- Observations.

- Reflective teacher feedback.

- Dedicated Computing Leader and Assessment Leader time

Evaluation and feedback will be achieved through:

- Dedicated Computing Leader and Assessment Leader time.

- Using recognised standards documentation for end-of-year expectations.

- Using recognised national standards for benchmarking Computing provision in primary schools.

- Written feedback on evaluation of monitoring activities to be provided by the Computing Leader in a timely manner.

- Feedback on whole school areas of development in regard to Computing to be fed back through insets/AOB/staff meetings.

Roles and Responsibilities

Head Teacher

- Monitoring the implementation of the Computing Policy and its associated policies such as the Safeguarding and SEND Policies.

- Ratifying (in conjunction with the Governing Body) the Computing policy, Safeguarding policy and Computing Leader's Action Plan.

- Securing technical support service contracts and infrastructure maintenance contracts.

- Approving CPD and training which is in line with the whole school's strategic plan.

- Approving budget bids and setting them.

- Creating in conjunction with the Computing Leader, a long-term vision for Computing which includes forecasted expenditure and resources.

- Monitoring the performance of the Computing Leader in respect to their specific job role description for Computing.

- Ensuring any government legislation is being met.

Computing Leader

- Raising the profile of Computing for all stakeholders.

- Monitoring the standards of Computing and feeding back to staff in a timely fashion so they can act on areas for development.

- Ensuring assessment systems are in place for Computing.

- Maintaining overall consistency in standards of Computing across the school.

- Reporting on Computing at specific times of the year to the Governing Body/Head/Staff.

- Auditing the needs of the staff in terms of training/CPD.

- Actively supporting staff with their day-to-day practice.

- Seeking out opportunities to inspire staff in developing their practice through modelling and sharing new ideas, approaches and initiatives.

- Attending training and keeping abreast with the latest educational technology initiatives.

- Using nationally recognised standards to benchmark Computing.

- Creating Action Plans for Computing and supporting a long-term vision which feeds into the whole school development plan.

- Creating bids for the annual budgets and monitoring budget spend.

- Procuring physical and online resources that demonstrate best value.

- Reviewing the Computing curriculum and developing it as needed.

- Overseeing the effectiveness of the technician.

- Working as needed with the SENCO/Head Teacher to ensure online safety provision is above adequate and all legislation is in place.

Technician

- Conducts routine scheduled maintenance/updates on systems.

- Supports the administration and set-up of online services including the school website.

- Routinely checks school filtering, monitoring and virus protection.

- Fixes errors/issues with hardware and software set-up, prioritising as needed.

- Maintains network connectivity and stability.

- Sets up new hardware and installations.

- Supports the Computing Leader and Head Teacher with future infrastructure needs and associated projected costs.

Administration Staff

- Maintains the school website content.

- Posts approved requests to the school's social media accounts.

- Supports procurement of resources and technical services.

- Supports the technician with some data management.

Health and Safety

- Welsh House Farm School takes all necessary measures to ensure both staff and pupils are aware of the importance of health and safety.

- Both staff and pupils are trained to handle electrical equipment correctly including how to power off and on. Pupils are reminded about the dangers of electricity and the danger signs to look out for. Adequate displays and warning signs are strategically placed around the school to reinforce health and safety.

Policy prepared by D.S.Farr Feb 2020

Policy to be reviewed July 2021