Aims

Computing has become part of the way we work and almost everything we do at school now involves the use of computing/ICT.

- Online lesson research, teaching plans and resource materials.
- Lesson delivery via interactive whiteboards.
- Communication by e-mail.
- Document distribution and storage.
- Assessment information analysis.
- Production and editing reports.

Through teaching Computing, we equip children to participate in a word of rapidly changing technology. We enable them to find, explore, analyse, exchange and present information. In addition to this, we help them develop the necessary skills for using information in a respectful and effective way. This is a major part of enabling children to be confident, creative and independent learners.

The objectives of teaching Computing are to enable children to –

- Develop Computing capability in finding, selecting and using information.
- Use Computing for effective and appropriate communication.
- Monitor and control events, both real and imaginary.
- Apply Computing skills and knowledge to their learning in other areas.
- Explore their attitudes towards Computing and its value to them and society in general. For example, to learn about issues of security and personal safety, confidentiality and accuracy.

Teaching and Learning Style

An objective of teaching Computing is to equip the children with the technological skill to become independent learners. While, at times, we do give direct instruction on how to use hardware or software, the main emphasis in teaching Computing is for children to use computers to help them to progress in whatever they are studying.

We recognise that all classes have children with a wide range of Computing abilities. This is especially true when some children have access to a computer/iPad at home whiles others do not. We provide suitable learning opportunities for all children by matching the challenge of the task to the ability and experience of the child. We achieve this in a variety of ways –

- Setting tasks which are open-ended and can have a variety of responses.
- Setting tasks of increasing difficulty (not all children complete all tasks).
- Using classroom assistants to support the work of individuals or groups of children.

Computing Curriculum Planning

The school uses the National Curriculum Programmes of Study as the basis for its curriculum planning. We have adapted the programmes to suit the needs of the children in our school.

We carry out the curriculum planning in Computing in two phases – long term and medium term. The long-term plan or Curriculum Overview, maps the Computing topics that the children study in each term, in each year group. It also shows how the teaching units are distributed to show progression throughout the school.

The medium term plans, which are adopted from the National Curriculum, give details about the unit of work for each term. They identify the key learning objectives for each lesson and the activities the children take part in. These also then form short-term plans. Each unit follows a procedure of teaching sessions with the key skills being taught and then an independent activity where children implement these skills.

The topics studied in Computing are planned to build on prior learning. While we offer opportunities for children of all ages and abilities to develop their skills and knowledge in each unit, we also plan progression into the scheme of work so that the children are increasingly challenged as they move up through the school.

Parents are required to sign authorisation before their child can use the internet/school blog in school. The parents are assured that their child's use of the internet in school is always supervised.

The contribution of Computing to teaching in other curriculum area.

The teaching of Computing contributes to teaching and learning in all curriculum areas. It also offers ways of impacting on learning which are not possible with conventional methods. Teachers use interactive whiteboards to present information visually, dynamically and interactively, so that children understand concepts more quickly. Computing enables children to present their information and conclusions in the most appropriate manner. A lot of software is generic and can, therefore, be used in several curriculum areas.

English – Computing is a major contributor to the teaching of English. As the children develop mouse and keyboard skills, their learn how to edit and revise text on a computer/iPad. They have the opportunity to develop their writing skills by communicating with people vie blogging. They also learn how to improve the presentation of their work. There is, in addition, a variety of software which targets specific reading, grammar and spelling skills.

Maths – Children use Computing in mathematics to collect data, make predictions, analyse results and present information graphically. Particular software allows pupils to give exact instructions for a particular route, or to use knowledge of angles to draw a range of polygons. Children can also use Times Table Rock Stars, an online Maths resource, to practise and develop their skills.

Science – Software is used to animate and model scientific concepts and to allow children to investigate processes which would be impractical to do directly in the

classroom. Data Loggers are used to assist in the collection of data and in producing tables and graphs.

Personal, social, health and citizenship education (PSHC) – Computing makes a contribution to the teaching of PSHC in that children learn to work more collaboratively and develop an awareness of e-safety. They also develop a sense of global citizenship by using the internet and the school blog. We teach the children to adopt a safe, appropriate and respectful behaviour when using the internet. Through discussion of e-safety and other issues related to electronic communication, the children develop their own view about the use and misuse of Computing and they also gain an insight into the interdependence of Computing users around the world.

Cross Curriculum – Computing is embedded in the curriculum with teachers using Computing to research and present findings in many different, creative ways.

Computing and Inclusion

At our school we teach Computing to all children, whatever their ability and individual needs. We strive hard to meet the needs of those pupils with special education needs, those with disabilities, those with special gifts and talents and those learning English as an additional language. We take all reasonable steps to achieve this. For further details see separate polices: Special Education Needs, Gifted and Talented, English as an additional language.

Often children with Special Education Needs derive considerable benefit from access to Computing. It can have a great impact on the levels of motivation and confidence in these children. At Holymead Primary School, we provide a wide range of software to meet the individual needs of the children. There are i-Pads that can be used in class and also around the school and these enable children to extend the use of Computing out of the Computing suite.

Assessment for Learning

Teachers will assess the children's work in Computing by making informal judgements during lessons. On completion of a piece of work, the teacher assesses the work and uses this assessment to plan for future learning. Feedback is given to the child to guide his/her progress. Older children are encourage to make judgements about how they can improve their and other children's work.

An assessment document is used to assess whether a child is working below the expected standard, towards the expected standard, at the expected or working at greater depth within the Computing Programme of Study. The final judgement is made by the teacher, using the Computing learning objectives.

Resources

The junior site benefits from a suite of 27 computers, two cases of iPads (16 iPads to a case), a Smart Interactive Whiteboard in each classroom and an additional iPad trolley (15 iPads). The infant site has 3 i-Pad trolleys with 16 i-pads in each. All

computers are connected to the internet via the school network and most software is already installed on the computers.

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