Computing

Intent

At Langford Village Academy, we believe that computing is not only a standalone subject but is an essential part of the curriculum which should play an important part in all areas of learning. Our intention is to prepare all children for a technological age which is rapidly changing and growing. Computing, in general, is a significant part of everyone's daily life and children should be at the forefront of new technology, with a thirst for learning what is out there. As outlined in the national curriculum there are three main areas that our computing curriculum is designed to cover: computer science, information technology and digital literacy. The computer science aspect, the core of the computing curriculum, teaches the children about the principles of information and computation, how digital systems works and how to put this to use. The children then build on this knowledge to use information technology to create programs, systems, store and retrieve information, and a range of content. By achieving both of these aspects our intent is to ensure that our pupils become digitally literate and are able to use and express themselves by developing their ideas at a level suitable for the future of the workplace; giving them an active place in a digital world.

Implementation

In meeting our intent, computing is taught using a blocked curriculum approach. The planning for this approach is taken from the "Purple Mash" scheme of learning. This ensures the children are able to develop their knowledge and skills through each of the computing topics and build upon these from foundation stage through to the end of year four. The planning has been developed to be engaging and to ensure all aspects of the curriculum are covered.

- We have a set of chrome books which are used for computing lessons. These are portable and are used by children across the whole school.
- Teachers supported by the subject lead to access all of the planning and resources that are needed.
- Long Term plan ensures coverage of all aspects of the curriculum through the two year rolling program.
- Internet Safety day covered across the whole school.
- The classes have iPads and tablets to allow an opportunity to use a range of devices and programs for many purposes.

We encourage the learning and use of computing is in a cross-curricular way; ensuring it is not just taught as a discrete subject. This includes typing up stories and work in English, researching in topic and science, mathematical games and phonics interventions.

The implementation of the curriculum also ensures that there is a balanced coverage of computer science, information technology and digital literacy. In each year group the children will experience all three aspects and their subject knowledge will become more specific and in depth. For example, in year 1 the children work on understanding what coding means and how to use this in its simplest form moving through to in year 4 being able to understand what variables are and how these can impact/change their program.

Impact

The impact of the teaching of computing will be evident within the lessons and activities children partake in at LVA. Our approach to the computing curriculum is engaging and high-quality and the impact of our approach will be seen in the children's enjoyment and demonstration of their understanding. If children are keeping up with the curriculum they are deemed to be making good or better progress. The children are able to save their work on the Purple Mash platform where they can share and evaluate their work. This also enables teachers to view, assess and evaluate children's attainment and progress.

The children are taught subject-specific knowledge and enabled to develop computing skills in their lessons. They will be provided with beneficial experiences which will give them the building blocks to enable them to access the curriculum as they go off to middle school and allows them to pursue a wide range of interests in their personal life.

In addition, we measure the impact of our curriculum through the following methods:

- Subject leader walks.
- Evaluation and scrutiny of work.
- Conversations with children.
- Teacher assessment against the outcomes outlined in Purple Mash planning which is linked to the computing curriculum.
- Evidence collected and filed online.
- Review of computing being used cross-curricular.