Subject on a Page for Computing

Why you teach it - your purpose of study

Technology is everywhere and plays an integral part in our children's lives. Therefore, at Colerne Church of England Primary School, we want to model and educate our pupils on using technology effectively, responsibly, and safely.

INTENT

What you teach - your programme(s) of study

As a village school, with a high proportion of military families, we feel there is an even greater need for our pupils to have the knowledge and skills to use technology effectively, responsibly and safely. With some of our parents being deployed, the desire and necessity to showcase and present their work through technology is paramount.

Our broad computing curriculum encompasses the 3 pillars of computer science, information technology and digital literacy that is progressive and builds upon key stage end points. It is balanced with opportunities for pupils to creatively apply and embed their knowledge and skills in order to support and enhance learning in other subjects.

Through the key stages, children are provided with opportunities to use a range of technological devices and tools, in addition to unplugged activities. We want our pupils to understand that there is always a choice with using technology and hope by Upper Key Stage 2, children will have the independence and confidence to choose the best tool to fulfil the task.

IMPLEMENTATION

How you teach it - your delivery of the above

Our Computing curriculum covers the 3 pillars of progression of the national curriculum:

1. Digital Literacy
2. Information Technology
3. Computer Science: Programming, Computer Networks and Computational Thinking.

Our spiral curriculum which encompasses a blend of both physical and unplugged activities, ensures previous areas of learning are regularly revisited. This allows learners to both consolidate prior knowledge and skills whilst providing a springboard for new skills and knowledge.

For Digital Literacy, we use the Project Evolve toolkit, covering the areas of Self-image & Identity, Copyright & Ownership, Health, Well-being & Lifestyle, Online Relationships, Online Bullying and Privacy & Security. Each unit is taught within the same term across the school.

In the Early Years, the Project Evolve units have been selected to meet the developmental needs of the children. These are; Copyright & Ownership and Self Image & Identity.

In addition to these units, international Online Safety Day is recognised and given a high profile across the whole school.

For Information Technology and Computer Science, teachers use the NCCE Teach Computing scheme. Adaptations to planning are made where necessary to meet the needs and skills of the children in class. Where possible, appropriate links are made across the curriculum to make learning purposeful and in context e.g. year 3&4 volcano poems, y1&2 instructional writing on how to look after a pet.

Lessons are taught by the class teachers with SEND learners supported by TAs.

We have a two-year rolling programme to meet the challenges of mixed-year classes. Both years A and B have a balance of the 3 pillars to ensure progression through both the year and key stage. Programming units, where concepts and skills rely on prior knowledge and experience, are taught in numerical order within the year as outlined in the National Curriculum.

Whilst computing is not a statutory requirement in the EYFS Framework, at Colerne we appreciate and use our Foundation Stage as the base to underpin the curriculum. Computational Thinking begins with verbal instructions and simple vocabulary interwoven through cross-curricular links. Children are given opportunities to explore hands on, practical and unplugged activities.

In Early Years and KS1, work is recorded in the form of a floor book whereas in KS2, children have individual books. High expectations are set for presentation of written work with clear learning objectives. This recorded work aids to document and celebrate learning but also acts as a support for children when discussing their lesson sequences.

A range of formative assessments are used by teachers to support learners and to inform the pace and future sequence of lessons. Learners are encouraged to reflect on their own learning through self-assessment techniques.

Summative assessments are matched to the learning objectives from the unit planning and teachers are required to update these regularly.

IMPACT

So what - your evaluations of the above

Our computing curriculum is high quality, well thought out and aspirational. It is planned to demonstrate progression of both declarative and procedural knowledge; 'Knowing That' and 'Knowing How'.

Children's progress and attainment is assessed through both a range of formative techniques in lessons and using summative assessment documents with children highlighted as 'Working Towards', 'Met' or 'Shining lights'.
In addition, we measure the impact of our curriculum through: a reflection on standards achieved against the planned outcomes through regular book scrutinies, pupil learning conversations, observations of learning and professional dialogue with colleagues.

Learning walks and discussions show that work is consistently being recorded and evidenced through floor books in KS1, individual computing books in KS2 and through Seesaw celebrations.

The impact of our online safety curriculum reaches beyond the school gates with regular articles published in our school newsletter. Useful websites and apps are frequently shared with families e.g. Common Sense Media, Ollee, Internet Legends robot, Think u Know and Internet Matters. As evidenced in pupil conferences the majority of children were able to explain many of the key themes embedded in our Project Evolve units. As many of these themes have strong links with our Jigsaw PSHE, it is evident that learning is being consolidated in both subjects.

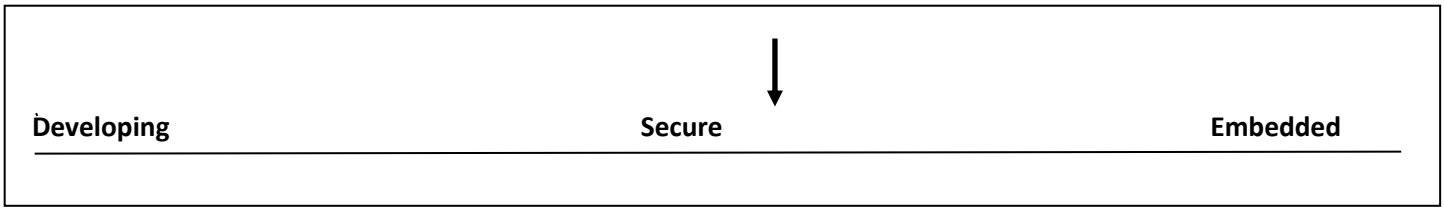
Additionally, through pupil learning conversations, alongside book scrutinies, children are beginning to verbalise their learning, using associated vocabulary, rather than simply recalling the activities/apps or programs used. During a recent school advisor visit, book scrutinies, show that children are proud of their work, which is presented neatly and clearly demonstrates the sequence of lessons.

Children's desire to celebrate their learning across all curriculum areas, through the use of technology, is evidenced through their independent use of Seesaw in Key Stage 2, particularly if a family member is deployed.

Children have utilised and applied their computing knowledge and skills within other subjects, when selecting an appropriate tool to present their work. E.g. During a poetry unit in year 3/4, children chose to present their individual poems through Book Creator and during a year 5/6 DT unit, DT and Computing skills were combined to design, make and control a moving model.

A recent staff survey, highlighted the positive impact of the organised curriculum through clearly sequenced planning which ensures progression and supports less confident practitioners. This was also echoed by a school's advisor.

On the scale below rate where you believe this subject currently stands in terms of your overall curriculum



offer:

** Please ensure you have compared this against judgements from other subjects and that your Headteacher agrees with your judgement.*

Previous Improvement Actions and Impact	Current Improvement Actions	Future Improvement Actions
The Subject Progression Map is in place and matched to the National Curriculum. All staff are now aware of prior and future learning and use lesson planning which plan for progression and depth. Lesson observations, learning conversations have been undertaken which ensure highly quality teaching in Computing is happening across all year groups.	Ensure Assessment is consistent and up to date. Ensure knowledge is being retained and embedded from term to term and year to year. Staff training is being undertaken – see separate list of training (online and face to face CPD)	Ensure vocabulary is embedded and there is progression in the vocabulary taught. Continue to explore CPD opportunities, particularly in Computer Science, for both subject leaders and the staff as a whole. Explore further ways to combat time constraints whilst still delivering high quality teaching and ensuring that all

		learning is embedded.

Previous CPD	Planned CPD
Book Creator training In house CPD: September ‘21 NCCE Mixed Year group curriculum mapping, whole school, online: October ‘21 Project Evolve Subject Leader course, online: September ‘21 Project Evolve CPD Whole school, in house: October ‘21 BETT exhibition – interactive whiteboard and ipads research: March ’22 Interactive whiteboard demonstrations, whole school: May-June ‘22 Programming without computers, Subject leader, online: June ‘22 Barefoot Resources, Subject leader, online: June ‘22 Barefoot Early Years, Subject leader, online: June ‘22 Computational Thinking, Subject leader, online: June ‘22 Scratch, Subject leader & deputy head, online: July ‘22	Scratch, Whole School CPD: September ‘22