Subject routeway

Subject: Computing

1. Curriculum intent:

At Unity Community Primary School, our aim is to provide a high-quality Computing education. It will enable children to use computational thinking and creativity to understand and change the world. Our children leave having gained the Computing skills they need, to engage and be active participants in the digital world. They have the essential knowledge needed for the future jobs market.

As a Rights Respecting School, we believe in our duty to keep children safe and our responsibility to educate children so they are protected from harm (UNCRC art. 32, 34, 36). Through a robust Computing curriculum, children are taught the skills they need to stay safe in a rapidly evolving online society.

Our Computing curriculum empowers children to use logical thinking, solve real-life problems in meaningful contexts. Through Computing, we support our children to aim high, be leaders as well producers rather than just consumers.

By the time they leave Unity, our children will have gained essential knowledge and skills in the three principal areas of the computing curriculum:

- Computer science - Programming and understanding how digital systems work.
- Information technology - Using computer systems to store, retrieve and send information.
- Digital literacy - evaluating digital content and using technology safely and respectfully.

Our children are responsible, competent, confident, and innovative users of information and communication technology.

2. Implementation

Throughout EYFS there are opportunities for children to access technology which will familiarise them for future computing lessons further through the school. This includes using interactive whiteboards, iPads, and other technology. This helps children become aware of different technologies within the school this also gives opportunities for children to use technology to express themselves creatively and constructively.

The school uses the expertly tailored Purple Mash scheme of learning to ensure a coherent and relevant sequenced scheme of work. This scheme of learning uses the Computing National Curriculum to ensure that all objectives are met by the time children leave our

school. Each unit revisits substantive concepts allowing the children to recap prior learning and to link each lesson with a previous concept to help retain the concept in their long-term memory.

3. Impact

Lessons start with reinforcement of previous lessons objectives using strategies such as sticky knowledge or low-key quizzing. There are clear objectives at the start of each lesson so children know what knowledge/skills they are working on that lesson. Assessment for learning is used in all lessons in Computing which is then followed by a summative task at the end of each unit. Work is recorded through the Purple Mash application where teachers can assess the outcomes of the lesson this is paired with an informal formative assessment used throughout lessons where teachers note down whether children are meeting the objective or working towards it. Pupil voice is used to check pupil understanding, knowledge retention and a grasp of key substantive concepts.

4. Inclusion

At Unity Community Primary we aim to provide an inclusive curriculum which can be accessed by all children throughout the school. To ensure this we use paired work across the curriculum so children can support each other through different projects. Adults are trained to support children through effective questioning which allows children to independently access their work. The school works with partner agencies to support children with hearing and visual impairments to support their learning across the subject. As a school we understand that children with SEND (Special Educational Needs and Disability) tend to be more vulnerable online which is why we explicitly teach online safety throughout the academic year.

5. Professional development

The school has a yearly professional development session with a Purple Mash expert. This session supports staff with extensive subject knowledge support for non-specialists. We have another professional development session ran by the curriculum lead each year which focusses on key subject knowledge, the scheme of learning, assessment and training for non-specialist staff which further supports the teaching of computing across the school. Quality teaching is modelled to staff to support their own pedagogical approaches to the teaching of computing. Support staff are also trained to support children to work independently and to scaffold learning.