GATEWAY FEDERATION SUBJECT STATEMENTS

SUBJECT: COMPUTING

Date: April 2020

INTENT (Aims, Aspirations, Linked to school values, Linked to our 'Federation Curriculum Statement')

In the Gateway Federation, we recognise the importance of computing and digital literacy to everyday life and how it connects to many other school subjects; we also acknowledge that the successful teaching and acquisition of key computing skills as outlined in the National Curriculum 2014 – analysis of computational problems, evaluation of new technologies, responsible and safe use of information and communications technology and understanding of coding - are critical to the future careers and jobs of all of our pupils; after-all, we live in the digital age. Determined to develop a responsible attitude to the subject and foster a thirst for knowledge, we are guided by the following key values:

- **Self-confidence -** developing and building up children's confidence so that they can safely use apps, software and hardware
- **Responsibility –** promote and encourage the responsible use of technology so that their digital footprints are of the highest standard
- **Respect -** to be aware and respectful of other users when interacting with all the platforms that they encounter at school and at home.

By using a variety of resources (e.g. Barefoot Computing, Lego We-do.....) to support our teaching, we aim to:

- **Inspire** children to develop a deep interest in computing
- **Encourage** children to take an active role in their learning
- **Support and assess all** children so they achieve their full potential
- **Plan** lessons that are inspiring, fun and logically sequenced

IMPLEMENTATION (Long term Plan, Teaching approach, Wider community, Ensuring Progression, Wider Opportunities, Enrichment / Additions to the curriculum.)

Driven by the National Curriculum 2014 in Key Stage 1 & 2, we have started to implement the BT Barefoot Computing scheme of work to deliver lots of unplugged aspects of the curriculum.

Through the sequence of lessons, we intend to inspire pupils to develop a love of the digital world, see its place in their future and give teachers confidence. Cross-curricular links are also important in supporting other areas of learning. Our lesson plans and resources help children to build on prior knowledge at the same time as introducing new skills and challenges. In KS1, the focus is on developing the use of algorithms, programming and how technology can be used safely and purposefully. In KS2, lessons still focus on algorithms, programming and coding but in a more complex way and for different purposes. Children also develop their knowledge of computer networks, internet services and the safe and purposeful use of the internet and technology. Data Handling is featured more heavily in UKS2. Skills learnt through KS1 and LKS2 are used to support data presentation

Flexibility amongst how teachers plan and deliver objectives is driven by the needs of individual cohorts. Regular conversations take place amongst subject leaders and class teachers to ensure that children have full opportunities to grasp the full curriculum.

In addition computing lessons are also underpinned by; targeted questioning by staff, selective use of laptops, iPads and coding manipulatives and opportunities to code, test and de-bug.

Children who have SEN or EAL are supported in a number of ways including; teaching key vocabulary prior to/at the start of the topic, seating children alongside good role models to support one another, providing visual/practical prompts, teaching lessons using a range of different techniques to appeal to different learning styles e.g. videos, artefacts, texts etc. and using directed adult support.

IMPACT (Measure of Success)

Successful users of information technology at both schools are characterised by having:

- *An understanding of the important concepts and an ability to make connections across a range of subjects.*
- *A confident awareness of how to use technology in a safe and responsible way*
- *An unshakeable knowledge of the vital importance of protecting personal data*
- *The ability to code confidently in a wide range of contexts*
- *The ability to think independently and to persevere when faced with challenges*
- *An awareness of a range of technical vocabulary*
- *A commitment to and love of the subject.*

Learning walks, exercise book analysis and staff discussions:
Through learning-walks – done by subject leaders in each school – we aim to observe computing lessons during the year regularly and analyse and discuss work that is done in class with teachers and pupils alike. Pupil questionnaires are also used to gauge pupil attitudes to the subject.

Safe internet use
As is common with other schools, we observe Safer Internet Week each year, but also emphasise to all children the importance of staying safe on the internet in computing lessons during the year, that involve an online element.

Positive areas for the subject. (What is working well in our schools?)

- The use of Lego we-do and iPads to promote coding in Key Stage 2
- The establishment of coding clubs at each school, involving Digital Leaders.
- The use and role of digital leaders
- Staff in both schools have individual i-pads and have had a series of sessions on education related apps
- The increased use of apps to produce work at key times of the year
- TA training throughout the year has improved TA's working knowledge of ActivInspire and other ICT resources.

Areas for development for the subject

- The acquisition of new laptops and iPads at Lea so that we have a full half class set of each item
- Inter house / school computing communication via See-saw
- Clear progression of skills matched to the objectives throughout both schools

Examples of experiences & activities children will have / do.

- Use of Digital Leaders in schools
- Attendance of digital leaders at computing conferences with Mark Sanderson during the year
- Lego we-do after school club
- Use iPads cross curricular – iMovie, PicCollage etc.
- Use of Twitter app in class (Lea)
- Use of school websites to access learning materials during lockdown
- West Mercia Police and NSPCC e-safety visits to Key Stage 2

Recent Curriculum Training / INSET	IMPACT
• Initial Barefoot Computing training was delivered by TG at Lea. • The course with BT was scheduled, but hasn't happened yet due to lockdown	Staff at Lea now have a scheme of work n/a

Curriculum Training Needs / Individual training needs.

- Barefoot Computing training will happen between both schools once we return to school later in 2020.
- Staff skills audit to be carried out to identify areas where staff lack confidence
- Continue TA training to enable all staff to access ICT effectively.

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