



Quality of Computing Education
at Lemington Riverside Primary School

INTENT

Our vision for our children as students of computing.

At Lemington Riverside Primary School, we believe: every child should:

- Be confident and creative when they are using technology,
- Be able to stay safe whilst using technology,
- Follow and understand E-Safety rules,
- Be able to use computer programmes to programme and solve problems,
- Be able to collect, analyse, evaluate and present data and information in different ways,
- Research using the most effective tools.

As we are living in a digital world, it is vital that the children gain the skills needed so they are prepared for jobs in the future. Research has shown that children who are Primary age will be fulfilling jobs that do not exist yet as technology is developing and changing daily. Through teaching Computing, we are enabling children to become creative, resilient and critical digital citizens ready for Secondary School as well as those future jobs.

Whilst at Lemington Riverside Primary School, pupils are introduced to a wide range of technology, including computers, Chromebooks, iPads and interactive whiteboards, allowing them to continually practice and improve the skills they learn. Overall, we aim for every child to be ambitious and confident in a rapidly changing technical world.



The principles of Computing and how they're delivered

Teaching of Computing

- In EYFS, Computing must be taught through play and by following the children's interests. We establish the skills such as problem solving and patterns which progress into algorithms and coding in Year 1. The children have access to iPads and use age-appropriate educational apps to develop their cross curricular learning. They will have access to computers to develop their mouse control and engage in unplugged activities to develop their ability to work with their peers and follow simple instructions, leading onto algorithms.
- In Key Stages 1 and 2, there are three core areas within the Computing Curriculum, which must be covered in every academic year. These are Computer Science (Programming), Information Technology (Creating digital content and computer skills) and Digital Literacy (E-Safety and understanding computer systems).
- Ilearn2 is a starting point to plan and teach Computing. Teachers will adapt the plans on iLearn2 according to their individual class and subject.
- Computing will be taught during allocated time across the year or when suitable within other subjects, such as typing a newspaper article in History.
- E-Safety must be taught at the end of every half term, so it is fresh in the children's mind when they are off school, to help them stay safe online.

Progression of Skills

Each area of Computing has been carefully planned and tailored for each year group to ensure that skills are developed upon and progress throughout the whole school. This will ensure that the children gain the skills needed to be ready for the next academic year then Secondary School.



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- In 2017, we had 30 computers in the Computer Suite and 30 iPads for the whole school. Computing was taught using these resources. I believe more resources were needed to develop children's love for learning following a child and staff audit.
- I applied for Raspberry Pis through the Raspberry Pi foundation and received 27 kits for our average class size at the time.
- In 2018, it became clear staff lacked confidence whilst teaching Computing, so I signed us up to iLearn2 as a scheme for planning, teaching and assessment across the whole school. This ensure the teaching of Computing was consistent across the school.
- As Raspberry Pis had become a popular resource in the class, I requested Mirco:Bits from Walbottle Campus who donated 27 Micro:Bits to our school.
- To develop children's passion and excitement for the Computing subject, I arranged for Gateshead College to work with KS2 children using Robotix. This not only engaged the children and their interests but lead to more girls being interested in the subject.
- In 2019, to continue to develop our bank of Computing resources, we arranged a cake sale to raise money to purchase Spheros. I believe with more exciting resources, the more interested and invested the children will be in Computing.
- In 2021, we were donated over 50 Chromebooks which are now used alongside our computers and iPads to enable more learning using technology to take place and the limited resources will no longer be a problem.
- In July 2021, Computing Teachers from the Royal Grammar School worked with our Year 6 children to complete some Programming tasks which was the highlight of most of the Year 6 feedback for Computing.

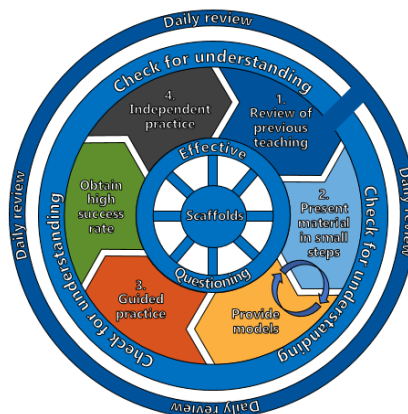
In a Computing lesson, this is what you will see:

- ✓ Lessons following the Teaching Cycle structure.





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- ✓ Each session will begin by reviewing previous teaching to assess the class' understanding. When the class is ready, new material will be introduced in small steps and models will be provided. Children will practice their new skill with guidance progressing onto working independently. During the session, teachers will be checking for understanding and addressing misconceptions.

Assessment

Work will be assessed on Book Creator. Each session, teachers will add the learning objective, photos of children's work alongside their comments on how they are achieving the objective on each page.

We know our children are achieving because...

- Our children will demonstrate deep Computational thinking and show skills which are transferable in all subjects.
- Our children will use computing resources confidently.
- Our children will be able to programme successfully for their age.
- Our children will be able to create digital content appropriate for their age.
- Our children will know how to stay safe online and show an understanding of the computer systems.
- Our children will embrace challenge during Computing lessons.

IMPACT

#WeAreLemington



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If learners need support we have these systems in place...

- Code /Computing Club at Lunch time and after school if children need extra support.
- Mini plenaries throughout the session to assess children's understanding and address misconceptions to ensure learning is moving forward.

