Computing

Intent

At Thrapston Primary School, we recognise that huge advancements in technology have been made in recent years, and now, more than ever children are surrounded by and often immersed in a technological world. We believe that technology will continue to evolve during the time our children are at school and we need to equip the children of Thrapston Primary School with the skills and knowledge they need to adapt and flourish with the ever-changing technological advancements. While developing their skills in computing we will also emphasize the importance of using technology safely, particularly in the online world. In all aspects of computing, we encourage children to be original and imaginative, fuelling their creativity using a range of equipment and programs to engage and inspire pupils. We will challenge pupils to deepen their knowledge and skillset further, as well as giving them an understanding of how the programs and technology they experience relate to their use in the wider world.

We understand that learning about technology starts from birth, as it is such an integral part of the environment and world for all young children. They are surrounded by technology, just as they are surrounded by language, print and numbers, in a variety of forms both inside and outside of their home. As well as computers and tablets children see machines that require programming all around them, from washing machines to supermarket tills. Technology is something children are going to grow up with, learn about and master, and use as a tool to increase their understanding in all areas of learning. At Thrapston Primary School our EYFS pupils will all engage with a variety of technology, both for designated purposes and to explore independently. The skills and knowledge developed here will form a firm foundation for our children to build upon in their journey through our school.

We recognise that technology can allow pupils to share their learning in creative ways and, now more so than ever, the collaboration through the use of technology has proved vital in many roles in society, when people have needed to adapt to new, remote ways of working together. This has highlighted the accessibility opportunities technology can provide for our pupils, both in terms of supporting their learning to achieve their very best, as well as being able to communicate with others to achieve things we never thought we'd need technology to do, like learning at home. Our skills based curriculum is balanced with the opportunity for pupils to apply their knowledge creatively which will in turn help our pupils become skilful computer scientists.

We encourage staff to try and embed computing across the whole curriculum to engage learners, as well as recognising the wider uses of technology, beyond just the acquisition and application of skills. Our hope for the children of Thrapston Primary School is that they find enjoyment in their computing skills, that they recognise the application of these in different areas of their learning, that they can be creative in the tools and programs they use, finding new and innovative ways to carry out tasks. By the time children are ready to leave us we want them to be fluent with a range of tools to best express themselves and their ideas. Above all we want our children to leave Thrapston Primary School with the independence and confidence to choose the best tool to fulfil a task, to be open and adaptable to new and ever-changing technology and to embrace computing as a means to express themselves creatively, recognising the implications for technology beyond school.

Implementation

At Thrapston Primary School we teach children according to the National Curriculum objectives which we support with the use of Switched on Computing by Rising Stars. We have a clear curriculum plan which shows progression in knowledge and skills right from our Nursery children all the way to Year 6. We have identified the key vocabulary that children will be introduced to as they progress through the school, clearly highlighting prior learning, so that children can continue to recall and retain this as well as broadening their computing vocabulary, which hugely supports their understanding of the purpose and functionality of what they are doing in computing.

In the Early Years many activities revolve around children developing an understanding of their environment. At Thrapston Primary School we discuss the different purposes and uses for technology that children may experience in school and at home. Computing equipment added to role-play reflects the real world, builds on children's experiences and allows them opportunities to understand how, why, when and where different forms of technology are used in everyday life. The changes to the Development Matters document reflect what we believe at Thrapston Primary School, in that technology is incorporated into all aspects of children's learning and this is also true of technology uses in the wider world. From a young age we want our children to recognise the purposes for using technology beyond school as well as allowing technology to engage and motivate them in their learning.

Early experiences form a foundation upon which our children in KS1 and KS2 can build upon, and this is reflected in our curriculum at Thrapston Primary School, with specific focus areas of learning planned in for both Nursery and Reception each term to develop targeted skills which are then developed as children continue their learning journey with us, as reflected in our skills and knowledge progression document.

In our school all classes in both KS1 and KS2 are allocated 1 hour per week in their timetable for the discreet teaching of Computing knowledge and skills, as we believe that particularly the computer science part of the computing curriculum will often, but not always, need a more explicit approach. We use the Rising Stars scheme of work to help support the teaching of these key skills and knowledge, and embedded within this scheme is also valuable CPD support for teaching staff to enable them to deliver this to the best standard possible.

Whilst Computing is taught discreetly, the use of technology to enhance and enrich other areas of the curriculum is strongly encouraged throughout the school. When planning their topics teachers look for opportunities to further develop the skills taught within a different curriculum context. We also believe that alongside the computing curriculum itself, all children should leave Thrapston Primary School with a good level of 'basic skills' as outlined in our progression document. These will prove vital for children as they continue their learning journey beyond Thrapston Primary School. We feel that using links to other subject areas, in particular English, can support the development of these basic skills as well as helping to instill in our children that computing is applied in many different areas of our learning.

At Thrapston Primary School we have an additional E-Safety curriculum, some of which is delivered within the Computing units that we teach to the children. However, each year group also delivers additional sessions explicitly throughout the year to further reinforce this. This is because, at Thrapston Primary School, we believe it is essential that all children know how to behave safely and responsibly in an ever-growing online world.

At Thrapston Primary School we recognise that, for some people in our school community, computing can be daunting and often challenging as the rapid advancements can leave us feeling 'left behind'. To combat this not only do we have a supportive resource in Rising Stars but we have a supportive feel between both staff and pupils, whereby we're in it together to get the very best out of us all. We recognise that the strengths in others can be used sensitively and effectively to build the confidence and self-esteem in others, so that everyone at Thrapston can feel a sense of pride and achievement in developing their own skills and understanding.

Impact

The impact of the computing curriculum can be seen in the digital work children save as well as the assessment of pupil's knowledge and skills during lessons, where notes are made and stored in class teacher's assessment files to support their assignment of outcomes. Through this tracking misconceptions can be addressed as well as identifying those learners who can be challenged further, ensuring all children can achieve their computing potential. The assessments made are used to inform parents at parents' evenings as well as in an annual report to parents.

At Thrapston Primary School we encourage our children to enjoy and value the curriculum we deliver. We want learners to discuss, reflect and appreciate the impact computing has on their learning, development and well-being. Finding the right balance with technology is key to an effective education and a healthy life-style. We feel the way we implement computing helps children realise the need for the right balance and one they can continue to build on in their next stage of education and beyond.