



Subject Leader Report: Computing

At Forefield Junior School, we are committed to ensuring our children leave us equipped with the knowledge, skills, understanding and confidence they will need to navigate through a rapidly developing digital world. Computing lessons are taught discretely to meet the national curriculum and ensure a clear progression of skills from year 3 up to year 6. However, the skills taught and, importantly, the e-safety messages taught, are reinforced throughout the curriculum and daily life in school. In particular, the iPads and Computer suite are also used throughout the rest of the curriculum to present work in different ways or to work collaboratively.

Our curriculum has been designed using a wide range of resources to fully impact on all aspects of learning. This includes a Computing Suite, 45 iPads (so more than one class can have them at a time) Probots and cameras for Stop-Motion Animation, amongst other resources. Alongside these physical resources, we also have a wide range of online subscriptions for example Geoboard, Mr Jump, Lightbot, Scratch 2.0 and Brushes Redux. To support home learning, we also have several website subscriptions such as TT Rock Stars, Spag.com, Lexia and Read Theory.

E-Safety

Across the curriculum, e-safety is taught at an age-appropriate level to all pupils both through the digital literacy element of our Computing curriculum, but also in PSHE too. In Computing, the children get an overview into various different online safety issues, including sharing kind messages online, image sharing, online bullying and how to block and report issues. Whereas in PSHE, the children focus on one particular online safety issue and how to resolve it. Our resources are tailored to ensure each year group is working on issues appropriate to that age group. For example, younger children could come across a message from someone they don't know on a gaming app so need to know how to block and report messages from unknown profiles, and need to understand how to ensure they only speak to their real-life friends online. Whereas in the upper juniors, the children need to understand how to talk to adults when they see their friends acting in a way that makes them feel uncomfortable online, and need to be equipped with the tools for how to manage this situation. Obviously, the children come across a range of online safety issues at all different ages, but by targeting key issues, we equip our children with the tools, skills, knowledge and confidence to keep themselves safe online. Additionally, e-safety is a message we constantly come back to, as it is always being taught through our everyday conversations with children, the examples we set, and the way in which we share username and password details with the children – ensuring it is always safe and secure. Within the last year, our E-Safety approach has been much more tailored to the children's lives and is opening up discussions about issues and Social Media platforms as they are rising. As a result, the learning is much more appropriate and is more likely to have a lasting effect as the children are learning about apps and issues they are coming across at home on a daily basis. Additionally, to support families at home, we have signed up to monthly newsletters from Knowsley City Learning Centre which provide the most up to date advice and alterations they can make to their children's account or device settings at home, to ensure the children are safe online at home.

Knowsley CLC Scheme of Work

Last year, we started the year with a brand new scheme of learning from Knowsley CLC. We started the year with training from Knowsley, and then got started with the first topic, My Online Life. This challenged everyone as it introduced a new style of teaching, with the children having a live, virtual

book on the iPads at the same time as the teacher working their way through the slides on the board. However, everyone got stuck in and it started off as a brilliant scheme. As we progressed through the scheme, we hit a few bumps in the road and needed to find new ways to teach Computing, as the planning and resources were not quite in line with how we wanted to teach. So, I have taken on everyone's opinions on different topics and I have started to create our own, bespoke curriculum here at Forefield Juniors.

Pupil Guarantee

In addition to the curriculum, our Pupil Guarantee aims to ensure that *every* child finds their passion through:

- Regular experiences of the Arts on stage, as an audience and as an artist/musician, enjoying a range of styles and influences;
- Encountering a variety of sporting activities competing at individual and team level, and pursuing this interest beyond the school or just for fun;
- Developing a curiosity about the world around them through science, nature or learning about other cultures, and discovering a sense of wonder;
- Making healthy lifestyle choices knowing how to eat well, exercise and promote their own well-being;
- Extending their learning through visits and visitors opening their eyes to the world beyond the school walls, culminating in a residential visit to Ambleside in Year 6.

From each experience, pupils can gain the strength to know that it is OK to be different and to encourage and appreciate the success of their friends.

Our Pupil Guarantee has technology throughout, just like our day-to-day life at school. The technology we have available for the children is helping them to gain a deeper curiosity about the world, as we are opening their eyes to parts of the world they have never seen before. Currently, our Computing curriculum helps the children to become aware of how rapidly the digital world is developing and how technological advancements are happening daily. In addition, we help the children to understand how such rapid changes are going to affect them as they get older, and how job opportunities in technology are going to be widely available for them when they get older. Here at Forefield, we open the children's eyes to the wider world from the classroom through resources such as Google Earth. In year 4, the children create wonderful IT work on their Science topic of Endangered Animals through Computing, and are able to visit the vast habitats of such animals, from the comfort of school. By using Google Earth, our children have visited the Arctic, Rainforests and the desert. Through quality E-safety and digital literacy lessons, children also learn the benefit of having a technology break on their mental health and wellbeing. At the same time, the apps that we have at school are enabling all children to see the world from different perspectives and is further developing their critical thinking skills as they question the authenticity of information they come across. In addition, children with additional needs are better supported through the use of technology, as it can be used in place of support staff in some circumstances or for those struggling with spelling, dictation and auto-correct can support. However, dictation and auto-correct do not take the place of learning how to write and spell, in which case our programmes such as Lexia support children too.

Bespoke Curriculum

As mentioned above, we changed our curriculum last year to use Knowsley City Learning Centre's scheme. As with any scheme, this had its positives and negatives; it was fantastic in the lower juniors but not as successful in years 5 and 6. Therefore, this year I have looked into the Teach Computing

scheme and some other resources we have used in the past in order to create our own, bespoke FJS Computing Curriculum. So far, this is how we envision it looking:

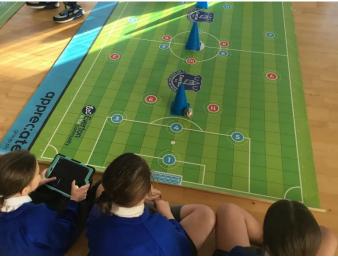
FJS Computing Map						
	YEAR 3		YEAR 4	YEAR 5		YEAR 6
AUTUMN 1	My Online Life – E-Safety	My Online Life – E-Safety		Computer Systems and Networks		Computer Systems and Networks – Communication and Collaboration
AUTUMN 2	Online Detectives – Advanced Internet Searching	Endangered Animals – Producing Publications		Video Production		Web Page Production
SPRING 1	Be Digitally Awesome – Microsoft Office Skills	Hour of Code — Writing Algorithms to Animate		EITC – Computer Science Project		EITC – Computer Science Project
SPRING 2		Fake or Real – Advanced Internet Searching		Making AR Games		Online Life – E-Safety
SUMMER 1	Dancing Robot – Scratch Jr	Dinosaurs – STOP MOTION ANIMATION		My Online Life – E-Safety		Data and Information – Introduction to Spreadsheets
SUMMER 2	Programming with Robots – Creating Algorithms	Games Designer – Create a game using Scratch		CHS Computer Science Topic		CHS Computer Science Topic
	DIGITAL LITERACY		INFORMATIO	N TECHNOLOGY	COMPUTER SCIENCE	

This curriculum has a mixture of Knowsley CLC, Teach Computing and our own Computing planning, to ensure we are hitting every area of the curriculum, as well as ensuring clear progression throughout school. As you can see, some areas are highlighted as these are areas that still need further development. Additionally, you can also see in the highlighted areas that I have begun to work with Chesterfield High School in years 5 and 6 to develop our Computer Science in the upper juniors, as this was an area we felt needed most work last year. Already, I am planning on tweaks and changes to further improve the first Autumn term for next academic year.

Everton in the Community

Last year, I was able to bring in Everton in the Community for a free, 6 week, set of lessons of Physical Computing. This was part of Everton in the Community's E-Steam project, which aims to provide all children with the digital skills needed for today's modern world. Everton brought along large football pitch-style mats, robots and their own iPads and the children wrote algorithms to programme the robots to meet the brief. Also, the children were tasked with debugging the robots when the algorithm was not working as it should have done.





Due to its success in year 6 last year, I have been able to book it for years 5 and 6 this year too. As well as excellent lessons for the children, this opportunity also provides excellent CPD for staff at the same time.

British Values

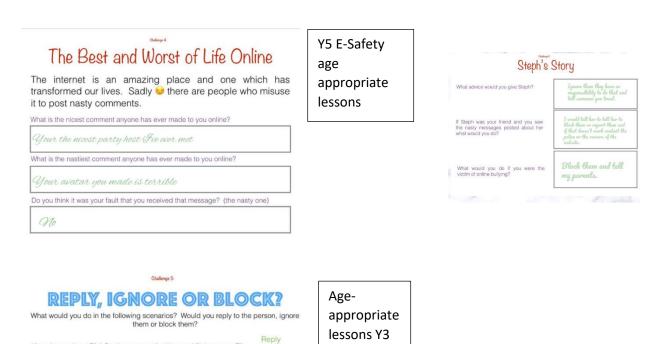
Our Computing curriculum reinforces the rule of law through e-safety objectives (e.g. copyright of digital imaging) and the acceptable use policy. Individual liberty is addressed when discussing social media and appropriate behaviour online. Peer assessment and open discussion facilitate opportunities to demonstrate mutual respect and tolerance.

Pupil Voice & Work Sampling

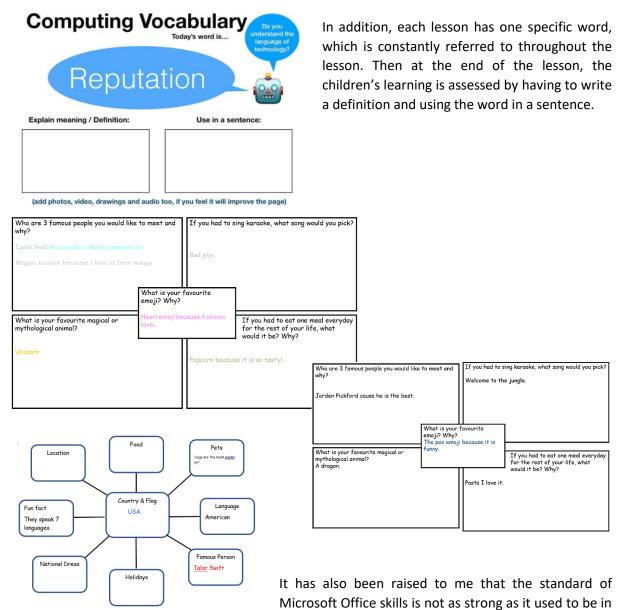
The children at Forefield Juniors enjoy their Computing lessons and talk confidently and cheerfully of using the iPads/Computing Suite. In particular, the year 3 children love having more opportunity to visit the Computer Suite and further enhance their Computer skills as well as iPad skills. Also, children understand how to stay safe online, and how to protect themselves and others online. Throughout last year, teachers planned carefully to make full use of the iPads, as there are now enough for two classes, and using technology to complete once handwritten tasks is becoming increasingly common. However, it is still crucially important that there is a balance, and again we do teach the importance of having a healthy lifestyle with digital time managed effectively.



Here are some examples of year 3 and year 5 work last year, particularly front covers of their e-books, which are created using Book Creator. You can see the children are using their digital skills to create their own front covers, and in comparison to year 3, you can see how the children are being challenged to add more images, emojis and have a different style font.



Hi, you're amazing at Fifa! Send me your email address and I'll share some Fifa vids with you! ☺ Block Hi, your friend Luke passed me your number. I've seen your posts they are soooo funny ☺ ! Also, across our e-safety lessons we have ensured that the content of the lessons is age appropriate. For example, year 5 is different to that in year 3, as the rules of e-safety have been applied to real life situations that the children could come across. The children have much more opportunity to discuss individual comments in year 5, and work together to come up with appropriate ways to deal with online safety issues. Whereas in year 3, the children still have plenty of opportunity to discuss online safety issues, however the response is much simpler. This has been planned to help the children remember simple rules of reply, ignore or block. Therefore, you can see how e-safety is taught at an age-appropriate level to all children and is tailored to what the children could come across to ensure they have a simple way of acting safely and responsibly online.



our pupils. So, I am working towards building in more opportunities to use Microsoft Office. Here are some samples of work from year 3 last year which includes work on Microsoft Word and PowerPoint. I have now also planned this into year 4 and year 6, to ensure there is progression as children move through school.

<u>Seesaw</u>

Now, we are confidently working with Seesaw alongside our teaching in class and it has grown into a powerful tool to support learning at home as well as improving communication between home and school. As we are needing to use Seesaw as a home-learning platform for isolating pupils far fewer than before, we are now benefitting from its reach to parents/carers at home. Now, it is rare that a letter needs to be sent out on paper as many forms of communication can be sent via Seesaw Announcements. This is especially useful for when a letter needs to be communicated to parents and not children.

Last year, we also bought into the monthly E-Safety Newsletters from Knowsley CLC to ensure parents and carers at home understand how to keep their children safe online. This monthly newsletter has the most up to date information, and is directly related to what most children are currently doing online. Seesaw is used to share this out at the beginning of every month, here is an example:



Safer Internet Day

Last year, Safer Internet Day's theme was all about having respectful relationships online. So, after an assembly all about staying stafe online, I created two Seesaw activities for children to complete at home. I thought it was important to teach Safer Internet Day in school, but to also share the activities with families at home, to ensure the same message is being shared and that we are working together as school and home to keep children safe online.



Preview: Safer Internet Day 2022 Upper Juniors



Using the iPads across the curriculum

iPads are used throughout the curriculum here at Forefield, and staff are confident in using them frequently in lessons. Last year, our Arts week had a brilliant photography element to it, here are some good examples of how iPads were used to enhance Arts Week:









But this is just one example, as there is often a scramble of teachers to get to the iPad timetable for a plethora of lessons. Often, the iPads are used for research purposes, but to also present work in a different way through using the different apps we have available.

<u>Assessment</u>

In Computing this year, 91% of children achieved the Expected Standard, with 14% reaching Exceeding. Looking ahead, I am working on supporting staff in assessing Computing, equipping each member of staff with clear end of year expectations for what an exceeding or expected child should be able to do by the end of each academic year.

Next Steps

- To finalise a bespoke FJS Computing Curriculum.
- To ensure that outcomes are clear and there is clear progression across the curriculum in all year groups.
- To continue to utilise the new resources we have across the curriculum, to develop digital literacy in all aspects of school life.

Thank you for reading about the wonderful progress we are making and continue to make, in Computing at Forefield Junior School.

Miss E Berry