



WESTFIELD PRIMARY SCHOOL

2020-21

Computing Subject Report

Subject	Computing	Date	September 2021
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Report prepared by	Kate Beattie
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Overview of the year: Sept 2020 - July 2021

This year was again impacted by the world pandemic, with the school closures in January impacting all classes. This was different to the first closure, as we had a significant increase of children in school, around 140. Westfield rolled out our digital learning platform across the school to great effect, with engagement rates between 90-100% in all classes. This gave us the opportunity to deliver high quality remote learning across the school, with specific, focused feedback given to all children.

During the first term of this school year, it was positive and eventful for Computing. Teachers are continuing to consistently teach and plan Computing, using the same tools (Scratch) across year groups so that clear progression to be seen. This has allowed children to develop and progress their Computing skills, being proud of their achievements and what they can do. There is a high standard of Computing lessons being taught across KS1, with children being introduced to 'Code-a-pillars' in EYFS. This leads very effectively to their use of Bee-Bots (for which new, engaging resources were purchased this year) in KS1. These new resources are being utilised very well by the teachers in these groups. In KS2, children are building upon their Scratch skills year by year, and a good level of subject knowledge and digital literacy is evident by UKS2.

The enthusiasm for our school ipads has grown, and we now have 90 across the school, allowing for ipads to be used one device per child, even in our three form year groups. These are now being used effectively across the curriculum, with plenty of opportunity for teachers to use these in a cross-curricular way. This is being done very effectively in UKS2, and it is an ongoing focus for children in KS1 and LKS2 to have these opportunities more.

The profile of Online Safety continues to be strong across the school, with children developing good subject knowledge. There was one parent workshop delivered in the Autumn term, with low attendance (5 parents). However, I still feel these are valuable to continue to offer for parents in case they are needed. These workshops were then presented virtually during the Spring and Summer terms via Youtube. This received 54 views. Moving forward, there are going to be virtual workshops sent out more regularly.

I collated many Online Safety resources and these were distributed to the Inclusion team, who support our variety of families. There continues to be Online Safety information each month in our school newsletter, covering relevant topics and new trends.

As a school, we celebrated Safer Internet Day virtually, as the school was closed to the majority of pupils.

In November 2020, we were lucky to host a Google Internet Legends assembly for all of KS2. Google did a personalised assembly for KS2 classes where children watched interesting skits about Online Safety and answered questions virtually. It was extremely popular. We were also sent some internaut statues (pictured) to give to children who were working at home. They constructed the statue using instructions given to them via video link where they had to answer questions to earn them.



The school has changed our network support from Soft egg to Eduthing, which has been a very positive move forward. This company encourage staff to contact them directly, relieving

pressure on others to organise support. They are far more present in school, making site visits promptly and efficiently when needed.

In January, the entire school went into a lockdown, leading to another change in planning and delivery of teaching. The importance for Online Safety teaching has become more important than ever, with children spending much more of their time online. I distributed Online Safety resources to all teachers to ensure that their home learning packs featured Online Safety lesson information and tips. To ensure that lessons were engaging, I shared a variety of online resources so that staff could run online quizzes and games (Kahoot, Quizziz, MyQuiz). These were utilised by many different teachers during the lockdown. We chose to use Seesaw for our online learning platform. This platform encouraged children to use their digital literacy skills to upload their work and interact with their teachers. Seesaw is also very similar to a social media platform, so this allowed teachers to constantly model good standards of communication online. Seesaw allows accessibility, so that every child at school was able to access it in some way (can still be used to a good effect through photographs from a parent's smartphone). Seesaw also allows for verbal communication from teachers and replicates our own marking and feedback system. If children were at home isolating during standard school time, Seesaw is the closest they can get to a true school experience, with feedback readily available from their teachers. Seesaw is also being used in school, allowing for extensive cross-curricular learning and exciting lessons using technology.

With the ongoing COVID-19 pandemic, it has become impossible for children to go on school trips and have in school visitors as much as we usually do at Westfield. Therefore, we have made some Computing purchases to ensure children still have access to exciting, engaging lessons. We invested in a year subscription to Now-Press-Play, immersive storytelling headsets with a lot of application to our own curriculum. Children can go on 20-30 minute 'experiences' with their class through a headset, listening to engaging, exciting stories. These have been embedded into our curriculum. We have also purchased 30 virtual reality headsets, alongside a subscription to the Class VR portal. These allow children to experience places all over the world, and have the chance to see exciting and interesting places they would not otherwise. It is our hope that the purchase of this technology will give children the chance to have some of the experiences that they would otherwise miss out on. With time, we hope to develop teachers' confidence to embed this technology into their teaching.

Curriculum: Intent, Implementation, Impact

Intent

- For all children to finish school as creators rather than consumers of technology in order to understand and change the world. Our curriculum, which encompasses computer science, information technology and digital literacy reflects this.
- Westfield recognises that in today's climate, the best prevention for issues related to technology, online safety and social media is further education and we strive to have all adults in school model positive use and clear understanding of online choices.
- Our curriculum is designed to engage all learners, with accessibility opportunities for DAP and SEND children. A skills-based curriculum allows for progression and opportunities for children to share.
- The use of Computing and technology is embedded across the curriculum ensuring that children have the chance to become fluent with a wide range of tools so they can understand and apply the fundamental principles and concepts of computer science.
- Children build upon their knowledge of computing year by year, and are encouraged to analyse problems, evaluate their work and take responsibility at every level. This starts in EYFS, the start of all learning, where children form the base upon which to develop on their journey through Westfield.

Implementation

A comprehensive and clear skills progression for Computing across the school has been created for staff to follow, and best embed and cover all areas of the Computing curriculum. The knowledge and skills statements are built upon year by year, so that children's understanding is constantly deepened and learners are being challenged.

In a constantly developing digital world, there is always opportunity to use technology to develop and enhance learning across the curriculum. Technology can be embedded within a wide variety of subjects and the children therefore have the opportunity to apply the skills that they have learnt. These cross-curricular opportunities allow for more engaging, creative lessons and opportunities for children to practically apply their learning.

How this looks in context at Westfield:

- In Year 2, the children learn about transport and create vehicles as part of their DT lessons. These are two of their Computing objectives during that term:
 - Know how to use images to present information
 - Understand how to take and record images and audio recordingsDuring their Computing lessons, they are taking and captioning images of their DT work to present. This not only gives them an engaging opportunity to present their DT work, but also means, with a subject area that they have knowledge in, their focus in the lesson is taking their effective photographs and developing their digital skills.
- In Year 5, the children start to learn about animation in their Computing lessons, using a variety of different applications on their ipads. Coinciding with this is their focus on the different planets during their Science topic of Space. The children create animations bringing to life the planets, giving them an opportunity to showcase their Science knowledge, and complete their Computing objectives in an engaging, purposeful way.

There are countless opportunities and examples for this cross-curricular usage of technology across school. The aim is to give children a relevant, purposeful way to make use of their digital skills across all areas.

While the use of Seesaw at school was necessary due to the need for remote learning, this is going to be an excellent tool moving forward with opportunities for cross-curricular learning.

Children have the opportunity to use new and exciting technology as part of their learning, with the use of Class VR headsets, 'immersive storytelling' headphones, 'live' lesson opportunities and Green Screen.

KS2 children have the opportunity to participate in a Coding Club each week.

Impact

Our subject progression and curriculum rationale give a clear overview for monitoring of coverage. Through quality assurance, it is clear that enthusiasm for technology and Computing is very high across the school, showing the importance of children receiving the opportunities to work on technology across the curriculum. While there is still room for improvement, cohesiveness across the school in terms of content being taught is much better, with our coding platform of Scratch being used consistently. Children leave KS1 with good understanding and skill, ready to build upon these in

KS2.

Confidence in planning and teaching of Computing continues to be an area of development in Year 3. Teachers are starting to develop their confidence to move forward with this. The teaching of Computing in KS1 is of a very high standard, giving children an excellent starting point for KS2. This is similar with UKS2, where children can apply many skills developed during school.

The profile of Online Safety is strong across the school, and all children show their great knowledge of the key points and rules for Online safety during Pupil voice. The school commemorated Safer internet day enthusiastically in February, with specific targeted lessons and KS1 and 2 assemblies.

Next steps:

- Continue to monitor and develop the use of Seesaw across the curriculum
- Continue to monitor planning and teaching of Computing across the school to ensure lessons taught are consistent, useful and engaging.
- Deliver termly parent workshops to deliver a clear and consistent Online safety message across school.
- Focus on children in KS1 and LKS2 having the opportunity to work using technology in a cross-curricular way.

5 Key messages of the year:	What Performance Information is monitored? What are the 3 questions are you considering for future developments?
<ol style="list-style-type: none"> 1. There is great increase in use of the I pads across the curriculum in all year groups. Seesaw has been a fantastic tool to give teachers the opportunity to evidence these. 2. The need for Online Safety is great due to the current climate; our strong subject progression has been vital when supporting children with this. 3. Children have access to a wide variety of applications and technology to enhance their learning (virtual reality headsets, immersive storytelling headphones, Seesaw). 4. Teachers have become more proactive and confident when it comes to teaching Computing, with high quality teaching taking place over the majority of the school. 5. The use of consistent technology and programs to teach Computing is allowing children to develop and take pride in their skills. 	<ul style="list-style-type: none"> - What are we doing to support parents understand Online Safety? - Are we evidencing children's Computing work effectively and using this in a proactive manner? - Is the increased use of technology in the school having a clear and positive impact?

<p>What is progress like within this subject?</p>	<p>How much funding did you receive this year and what was it spent on?</p>
<p>The past few years have shown a rise in the whole school engagement in Online Safety. Children's progress and understanding of Computing has improved. There has been a necessity to improve children's digital literacy skills within the global climate, which has been prioritised.</p>	<ul style="list-style-type: none"> - Maintenance of equipment around the school, laptops, computers and whiteboards. - 30 additional ipads. These have been based in the Year 6 block to avoid cross contamination. There are now 90 across school. - Resources for KS1 to facilitate Coding teaching - Code-a-pillars, BeeBots and themed BeeBot mats. - Virtual reality headsets for whole school - Subscription to immersive storytelling site (Now Press Play)
<p>How does your subject area help to further develop SMSC (Learning for Life) in and around the school?</p>	<p>How are Fundamental British Values promoted within your subject?</p>
<ul style="list-style-type: none"> - Children learning about Online Safety and developing their digital resilience supports them while they use technology at home. - Digital literacy skills are becoming increasingly important across all areas of the curriculum, and in wider life. 	<p>Individual Liberty - Understanding our actions online and what the consequences of these can be</p> <p>Mutual Respect - the importance of treating others in the way we would want to be treated and working together to support one another.</p>
<p>If you could change/ develop one thing in this area what would it be and why?</p>	<p>What will be the three key resources you will be bidding for this year and why?</p>
<p>The school would benefit from additional funding with which to purchase more devices - the opportunities to develop lessons and enhance learning using technology grow all the time and availability of devices can inhibit that.</p>	<ol style="list-style-type: none"> 1. Continuing the paid version of Seesaw - this would allow for flexibility of subject monitoring, unlimited 'activity' library and skills based marking. 2. 30 additional ipads - ideally, there would be ipads in each year group to ensure they are being used consistently. 3. Renewal of the Virtual reality online portal subscription - to allow for further use of this technology in school.

Subject Web: Subject Web: Why do we teach what we teach?

Every child is entitled to a broad and balanced curriculum. We aim to provide the highest quality of education for all our children, in an environment that is challenging, motivating, disciplined, caring and moral, where children can acquire the Computing skills and knowledge appropriate to their individual needs through the delivery of a creative Computing curriculum. This provides opportunities for individuals to acquire knowledge, skills and understanding; promote the moral and mental well-being and development of our pupils (specifically when teaching Online Safety); and prepare pupils for the opportunities, responsibilities and experiences of adult life. Through our pledge we promise a range of exciting learning and life experiences.

6 key skills:

1. Understand how to behave appropriately online
2. Develop resilience to and understand how to respond to negative situations online
3. Understand the process of using algorithms to program
4. Be able to program effectively for purpose
5. Develop a range of digital skills
6. Be able to select the appropriate program or tool for the task at hand.

How do you ensure every skill is taught within your subject?

There is a clear skills progression document and Curriculum Overview and rationale that ensures knowledge and understanding required is covered, alongside the necessary skills development.

Quality Assurance (recorded in Subject Leader files and using Seesaw, going forward) provides evidence through photographs, videos, comments and pupil voice that children are learning skills and applying these to other sports across the subject and in other areas of school life.

Topics taught across each year group:

	<i>Autumn 1</i>	<i>Autumn 2</i>	<i>Spring 1</i>	<i>Spring 2</i>	<i>Summer 1</i>	<i>Summer 2</i>
R	Online Safety	Understanding the World	Online Safety	Understanding the World	Online Safety	Understanding the World
1	Online Safety	BeeBots	Online Safety	Typing	Online Safety	Paint/Scratch JR
2	Online Safety	Scratch (Shape)	Online Safety	Typing	Online Safety	Posters/Data Handling
3	Online Safety	Scratch - Boat Race	Online Safety	Word and Powerpoint	Online Safety	Making videos
4	Online Safety	Scratch - Quizzes	Online Safety	Publisher and Excel	Online Safety	Scratch - Archery
5	Online Safety	Catch the Sprite - Scratch	Online Safety	Stop Motion & Space Invaders (Scratch)	Online Safety	Flowol and Powerpoint
6	Online Safety	Broadcasting (Scratch) & Remembrance PPTS	Online Safety	Kodu & God projects	Online Safety	Scoring Goals (Scratch) and graduation videos

Describe what a good learner of this subject looks like when they leave Westfield Primary School?
 Staff at Westfield try to embed the use of computing and technology across the curriculum to ensure that learning is creative and accessible to all. We want children to be fluent with a wide range of tools to best express their understanding, and hope, by the end of KS2, children will have the independence and confidence to choose the best tool to fulfil tasks and challenges set by teachers.

What are the 7 key components of a good learner in your subject?

1. Understanding of how to be safe online
2. Resilience when using the internet
3. A reflective attitude toward online content
4. Confidence using digital tools
5. Enthusiasm for technology
6. Pride in their skills and achievements
7. Ability to apply their learning across the curriculum.

What does Fast Feedback look like in your subject?

How do you know this has been effective for children's progress?

Children receive on the spot feedback during their ICT lessons, and are given the opportunity to use and develop the skills they have in their learning moving forward. Evidence of this effective learning is seen in pupil's work.

Is your subject an SDP priority?

Not at present

Has there been school training and / or development related to your subject / specific SDP objectives?

Have you taken part in any individual research?

The school are due to take part in a research project - Gender Balances in Computing - in October 2021.

What has been the impact of this on the children and staff?

We are hopeful that this will promote STEM careers and hobbies amongst girls.