

WESTFIELD PRIMARY SCHOOL

2022-2023

Computing Subject Report

| Subject | Computing | Date | September 2023 | | |
|---------------------------------------------|--------------|------|----------------|--|--|
| Report prepared by | Kate Beattie | | | | |
| Overview of the year: Sept 2022 - July 2023 | | | | | |

It has been a strong year for Computing across the school. With technology being incorporated in the curriculum more and more, children were able to utilise all the resources in school to their full potential, which includes VR Headsets, now press play headphones, ipads, chrome books and Computers.

We have continued to invest in the paid subscription of Seesaw across the school, and our high level of engagement in this site during the pandemic has continued to be a great positive. Children are using Seesaw in classes across the curriculum with several great benefits:

- This allows for engaging, active lessons to be taught and evidenced across the school, which are the type of lessons we actively encourage and ensure children learn effectively.
- Children can use seesaw for their homework, reducing the workload of teachers, pressure on school budgets and gives scope for a wider range of activities (online games and quizzes)
- Children have developed their digital literacy skills in navigating and uploading in apps (links very well to KS1 curriculum)
- This works to break down the barriers of SEND and DAP using audio recordings and pictures.
- Reflects our focus on online safety Seesaw replicates a social media platform in a safe, controlled environment.

Discussion with staff and teachers demonstrates that Seesaw has been a great tool and enhances our curriculum.

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 and automaticity, 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 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.

We are continuing to use chromebooks across the school, with a device per child in Year 6. This sets them up well to develop the digital literacy skills they will need while using devices at secondary school, and gives them the responsibility of looking after a device.

Children continue to produce digital artefacts using consistent applications and programs throughout the school, notably Microsoft Word and Powerpoint, Seesaw, Apple Clips, Kodu, Stop Motion Studio Scratch and Scratch Jr. This improves children's automaticity across the school, ensuring their understanding of processes continues to grow.

The enthusiasm for our school ipads has grown, 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 KS1, and it is an ongoing focus for children in LKS2 to have these oppurtunities more.

The profile of Online Safety continues to be strong across the school, with children developing good subject knowledge. There were parent workshops delivered virtually via Youtube. This has been positively received.

We are now going into our third year of using Project Evolve across the school. This resource allows us to deliver Online Safety half termly rather than termly.

- This resource is government recommended via KCSIE.
- Each year group studies the same half termly focus each taken from a strand of Project Evolve. This focus is then included in our school newsletter and in parent Online safety resources sent out. this allows for discussion at home and amongst siblings.

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. I conducted staff training into Online safety in the Spring term, which I compile myself.

As a school, we celebrated Safer Internet Day in classes, with a virtual assembly for KS1 and KS2 done by myself. Children undertook many different activities, making use of Seesaw.

In November 2022, 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 doing well. They constructed the statue using instructions given to them via video link where they had to answer questions to earn them.

Eduthing continue to be a great source of support to staff. 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.

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 oppurtunities for DAP and SEND children. A skills-based curriculum allows for progression and oppurtunities 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 recordings

 During 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 oppurtunities 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 and 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 crosscurricular way.

What Performance Information is monitored? What are the 3 questions are you considering for future developments? 1. There is great increase in use of technology across the curriculum in all year groups. Seesaw has been a fantastic tool to give teachers the opportunity to What Performance Information is monitored? What are we doing to support parents understand Online Safety?

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.

evidence lessons.

- 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.
- The use of consistent technology and programs to teach Computing is allowing children to develop and take pride in their skills.

- Are we evidencing children's Computing work effectively and using this in a proactive manner to inform teaching?
- Is the increased use of technology in the school having a clear and positive impact?

| What is progress like within this subject? | How much funding did you receive this year and what was it spent on? | | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
| 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. | Maintenance of equipment around the school, laptops, computers and whiteboards. Subscription to immersive storytelling site (Now Press Play) Paid subscription to Seesaw. | | | | |
| How does your subject area help to further develop SMSC (Learning for Life) in and around the school? | How are Fundamental British Values promoted within your subject? | | | | |
| 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. | Individual Liberty - Understanding our actions online and what the consequences of these can be Mutual Respect - the importance of treating others in the way we would want to be treated and working together to support one another. | | | | |
| If you could change/ develop one thing in this area what would it be and why? | What will be the three key resources you will be bidding for this year and why? | | | | |
| 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. | Continuing the paid version of Seesaw - this would allow for flexibility of subject monitoring, unlimited 'activity' library and skills-based marking. Additional ipads - ideally, there would be ipads in each year group to ensure they are being used consistently. 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:

| | A | Autumn Spring | | ring | Summer | |
|---|------------------|----------------------------------------------------|---------------|----------------------------------------|---------------|--------------------------------------------------------|
| 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 | Posters/Photos and captions | Online Safety | Typing | Online Safety | Scratch (Shape) |
| 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 and through conversations and pupil voice.

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 taking part in a STEM research project through Surrey University next year.

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

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