HOWE DELL PRIMARY SCHOOL
Computing Policy
Autumn 2025
Next review: Autumn 2027

Intent

At Howe Dell, our computing curriculum empowers pupils to leave Year 6 as confident Masters of Technology rather than passive users. We deliver a dynamic and adaptable curriculum using Teach Computing resources alongside the CUSP iPad curriculum, ensuring lessons meet the evolving needs of every learner. Our approach encourages children to be innovators and problem-solvers, not just users of technology. This foundation equips pupils with the skills to think critically, design solutions, and apply technology creatively. Through explicit computing lessons, pupils build deep knowledge and apply it across a range of subjects preparing them to thrive in a digital world with confidence and creativity.

We also understand the accessibility opportunities technology can provide for our pupils. Howe Dell utilises a range of technology to support children's learning, allowing them to use technology such as word processing apps, Bee-Bots, Micro:bits, as well as apps on the iPad and Chromebook. As a school, we also use Curriculum Visions digital books to support and enrich our CUSP resources and provide children with further reading opportunities.

Technology is everywhere and plays a pivotal part in students' lives. Therefore, we model and educate pupils on how to use technology positively, responsibly and safely. We promote awareness of safe internet use across the school and embed this practise in all subjects where technology is used as a tool for learning. At Howe Dell, we observe Safer Internet day. Our pupils understand that there is always a choice when using technology and as a school, we utilise technology (for example, our Twitter account) to model positive use. We recognise that the best prevention for issues we may encounter with technology and social media is through education. Each year, children and their families agree to safe use of technology and school expectation by signing our e-safety user agreement.

Our children leave us fluent with a range of tools and technology to best express their understanding and have the independence and confidence to share their learning with others.

Aims of the National Curriculum for Computing

The national curriculum for Computing aims to ensure that all pupils:

- Understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms, and data representation.
- Analyse problems in computational terms and gain repeated practical experience in writing computer programs to solve such problems.
- Evaluate and apply information technology, including new or unfamiliar technologies, to solve problems analytically.

- Become responsible, competent, confident, and creative users of information and communication technology.

Key Stage 1

Pupils should:

- Develop an understanding of what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise instructions.
- Create and debug simple programs, using logical reasoning to predict the behaviour of these programs.
- Use technology purposefully to create, organise, store, manipulate, and retrieve digital content.
- Recognise common uses of information technology beyond school.
- Learn how to use technology safely and respectfully, keep personal information private, and know where to go for help and support if they have concerns about content or contact online.

Key Stage 2

Pupils should:

- Continue developing their understanding of algorithms and programming by designing, writing, and debugging programs that accomplish specific goals, including controlling or simulating physical systems.
- Use programming techniques such as sequencing, selection, and repetition, and work with variables and different forms of input and output.
- Apply logical reasoning and computational thinking to explain algorithms and detect and correct errors in programs.
- Understand how computer networks, including the internet and the World Wide Web, provide multiple services and opportunities for communication and collaboration.
- Use search technologies effectively, understanding how search results are selected and ranked, and evaluate the relevance and reliability of digital content.
- Select, use, and combine a variety of software on a range of digital devices to design and create programs, systems, and content for specific purposes, such as collecting, analysing, evaluating, and presenting information.
- Continue to use technology safely, respectfully, and responsibly, recognise acceptable and unacceptable behaviour online, and know how to report concerns about content or contact.

Implementation

Planning

At Howe Dell, Computing is taught across each year group in modules that enable pupils to develop and apply their computational thinking skills, understanding and vocabulary. Each module aims to activate and build upon learning from previous modules and year groups, to ensure better cognition and retention. Each module is carefully sequenced to enable pupils to purposefully layer learning from previous sessions to facilitate the acquisition and retention of key knowledge, skills and vocabulary. Computing units are taught using a range of technologies and devices as well as in 'unplugged' lessons that showcase their understanding of key skills and processes without the use of a device. This allows children to apply their computational thinking skills to problems not involving technology.

Vocabulary

Vocabulary forms a key part of our wider curriculum. Subject specific vocabulary is incorporated into each module.

Continuous Professional Development

All staff have access to year-group-specific training on the Teach Computing website, as well as targeted courses such as programming, behaviour for learning, assessment, and essential computing skills.

Impact

Pupil Book Study

Senior leaders and subject leaders regularly undertake book studies to monitor the effectiveness of teaching and learning. This includes sessions with small groups of pupils using questioning to check and ensure information and knowledge is acquired and understood with increasing confidence. Feedback is given to teaching staff to inform future planning.

Y6 - Computing Book Study January 2025

I can see that last term you were learning about **Creating Media and Data and Information.** Can you tell me any more about that? That is interesting, can you go a little bit further now and tell me more information about that (you may use your book if that helps)? Can you explain the task to me? Can you recall any skills you have learned in other year groups that have helped with your learning in this unit? Tell me about that.
The first thing we did in year 6 was Tinkercad. It was a project where we created 3D models. We built little houses using this app. 3D means three-dimensional, height, length and width. We made a name plaque and a 3D box . We learnt how to mould the words and the block together. You have to try and lift it up using certain keys on the app. In the end, we made our own house with a garden. We had the freedom to design this. 'I took blocks and wanted a two-layer house so I stacked it. I used a brown block to use for the door. I used a prism for the roof. This could be stretched.' 'I made an apartment with a roof and back garden'

Extract of pupil voice from Year 6 Pupil Book Study

Y3 - Computing Book Study January 2025

I can see that last term you were learning about **Computing Systems and Networks, and Creating Media.** Can you tell me any more about that? That is interesting, can you go a little bit further now and tell me more information about that (you may use your book if that helps)? Can you explain the task to me? Can you recall any skills you have learned in other year groups that have helped with your learning in this unit? Tell me about that.
Creating Media - We had to draw a trampoline and move the person each time we took a photo. - We had to press to play all of the photos in order - It's called animation - Animation means you take a picture and then another one, and you can edit it. - You can make it like a story and animation means you can take the pictures without your hands in it - We had to move the person up a little each time, then press play LB showed photos on padlet. - Chn described how they needed to move the pictures in small steps to make the animation realistic - Lots of small videos combined to make it move, you can't make them too long otherwise it'll be boring - Recalled that it was called 'imotion' - Recalled 'onion skin' (with prompting)

What do you like about this study? What helps you in lessons? (Or is there something you think might help you?)
SF-I like coding and making videos; you can use different techniques and things like crops to make it how you want AB-a useful resource for me is using what's around us after it has been explained and I can use my knowledge to help me use the laptop HM-AB's way is good but often I put stuff in my Draft Book to help me remember SF-I also add notes if I really like the information RW-when we did coding on Scratch I was really excited to use the computers and laptops-my Draft Book helped me because I had made notes about what to do.

Extract of pupil voice from Year 3 Pupil Book Study

Ongoing Teacher Assessment

Teachers assess pupils throughout each module using the grids below to monitor pupils and inform planning for subsequent sessions.

Total number of pupils in class	**Initials of those WTS / F20%**	**Number EXS**	**Initials of stand out pupils**
Assessment notes: E.g. areas to revisit next half term.			

Screenshot of assessment grid for all year groups