

The Oaktree School

Computing Long Term Plan and Skills Progression

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Teachers at The Oaktree can use this LTP to ensure they are covering the curriculum in their Computing planning. This document includes a skill progression (Sheffield Primary Computing Progression Framework) ranging from EYFS to Year 2 and it is combined together with statements from the “Educated for a Connected World” document. The 6 strands of the skills progression cover the 3 areas of the Computing curriculum (IT, DL, CS). The statements set out in the 8 areas of “Education for a Connected World” are absolutely critical to ensure the children can be citizens of a digital world. This will allow the children of The Oaktree School to build their practical skills along with their emotional/social/mental resilience in the online world. Children will be confident, knowledgeable, respectful, kind and aware of the risks and dangers (as well as the good) that comes with exploring the internet.

Education for a Connected World

Self-image and identity – This strand explores the differences between online and offline identity beginning with self-awareness, shaping online identities and how media impacts on gender and stereotypes. It identifies effective routes for reporting and support and explores the impact of online technologies on self-image and behaviour.

Online relationships- this strand explores how technology shapes communication styles and identifies strategies for positive relationships in online communities. It offers opportunities to discuss relationships and behaviours that may lead to harm and how positive online interaction can empower and amplify voice.

Online reputation- this strand explores the concept of reputation and how others may use online information to make judgements. It offers opportunities to develop strategies to manage personal digital content effectively and capitalise on technology’s capacity to create effective positive profile.

Online bullying- this strand explores bullying and other online aggression and how technology impacts those issues. It offers strategies for effective reporting and intervention and considers how bullying and other aggressive behaviour relates to legislation.

Managing online information- this strand explores how online information is found, viewed and interpreted. It offers strategies for effective searching, critical evaluation and ethical publishing.

Health, well-being and lifestyle- This strand explores the impact that technology has on health, well-being and lifestyle. It also includes understanding negative behaviours and issues amplified and sustained by online technologies and the strategies for dealing with them.

Privacy and security- This strand explores how personal online information can be used, stored, processed and shared. It offers both behavioural and technical strategies to limit impact on privacy and protect data and systems against compromise.

Copyright and ownership- This strand explores the concept of ownership of online content. It explores strategies for protecting personal content and crediting the rights of others as well as addressing potential consequences of illegal access, download and distribution.

EYFS

Children in our Early Years setting should be taught these skills discretely and through cross curricular learning.

Skills Progression in line with NC (beyond EYFS statements)

What is a computer?

- Use different digital devices
- Understand that you can access content on a digital device
- Use a mouse, touchscreen or appropriate access device to target and select options on screen
- Recognise a range of digital devices
- Recognise the basic parts of a computer, e.g. mouse, screen, keyboard
- Recognise key parts of a keyboard e.g. spacebar, numbers and letters
- Understand that you can access the same content on different devices
- Add text to a document using the keyboard
- Understand that information and media can be stored on a digital device, e.g. they ask to view a photo that has been taken on a tablet.

Communicating: Text/images and multimedia

- Use technology to explore and access digital content
- Operate a digital device with support to fulfil a task
- Create simple digital content, e.g. digital art
- Choose media to convey information, e.g. image for a poster
- Choose a digital device from a selection to complete a specific task

Understanding and Sharing Data

- Access content in a range of formats, e.g. image, video, audio
- Sort familiar objects into 1 or more categories
- Answer basic questions about information displayed in images, e.g. more or less
- Can distinguish between text, image, video and audio content
- Collect simple data (e.g. likes/dislikes) on a topic
- Can present simple data using images, e.g. number of animals

Programming and Computational Thinking

- Explore technology
- Repeat an action with technology to trigger a specific outcome
- Recognise the success or failure of an action
- Follow simple instructions to control a digital device
- Try alternative approaches to achieve a goal
- Understand that we control computers
- Can order the steps of a known task
- Input a short sequence of instructions to control a device
- Recognise patterns in groups of objects

Online Safety and Digital Literacy

- Pupils are aware that some online content is inappropriate

- Are aware that information can be public or private recognise inappropriate content and know to tell an appropriate adult
- Can describe what makes a good friend

Self-image and identity

- I can recognise that I can say “no”/ “please stop”/ “I’ll tell”/ “I’ll ask” to somebody who asks me to do something that makes me feel sad, embarrassed or upset.
- I can explain how this could be either in real life or online.

Online relationships

- I can recognise some ways in which the internet can be used to communicate.
- I can give examples of how I (might) use technology to communicate with people I know

Online reputation

- I can identify ways that I can put information on the internet

Online bullying

- I can describe ways that people can be unkind online
- I can offer examples of how this can make others feel

Managing online information

- I can talk about how I can use the internet to find things out
- I can identify devices I could use to access information on the internet
- I can give simple examples of how to find information (e.g. search engine, voice activated searching)

Health, well-being and lifestyle

- I can identify rules that help keep us safe and healthy in and beyond the home when using technology
- I can give some sample examples

Privacy and security

- I can identify some simple examples of my personal information (e.g. name, address, birthday, age, location)
- I can describe the people I can trust and can share this with; I can explain why I can trust them

Copyright and Ownership

- I know that the work I create belongs to me and I can name my work so that others know it belongs to me

Year 1

Pupils in Year 1 should be taught these skills discretely and cross curricularly.

What is a computer?

- Name a range of digital devices
- Explain what the basic parts of a computer are used for e.g. mouse, screen, keyboard
- Understand that you can find information from a website
- Use a simple password when logging on, where relevant
- Understand that you can share digital content
- Recognise and use a range of input devices, e.g. mouse, keyboard, microphone, touchscreen
- Recognise and use a range of devices that contain computers, e.g. washing machine, car, laptop
- Know where to save and open work
- Understand that you can use a search engine to find information using keyword searches
- Understand that all devices, programs, websites, apps and games are designed and manufactured by real people to fulfil specific tasks

Communicating: Text, Images and Multimedia

- Select media (e.g. images, video, sound) to present information on a topic
- Understand that you can edit and change digital content
- Select basic options to change the appearance of digital content
- Combine media with support to present information, e.g. text and images
- Apply edits to digital content to achieve a particular effect
- Plan out digital content
- Present ideas and information by combining media independently
- Talk about what makes digital content good or bad
- Edit digital content to improve it

Understanding and Sharing Data

- Identify an object by asking yes/no questions
- Recognise charts, tables or branching databases and understand why we use them
- Explain information shown in a simple chart, pictogram, infographic or database
- Use specific software to create simple charts
- Collect data on a topic (eye colour, pets etc)
- Present data in a pictogram independently
- Identify an object using a branching database
- Recognising an error in a branching database
- Create a branching database using pre-prepared images and questions
- Find out similar information in different formats, e.g. text, video, audio
- Explain how different formats communicate information and their benefits
- Independently plan out and create branching databases
- Evaluate a given branching database and suggest improvements
- Understand that the questions you ask are important, when collecting data

Programming and Computational Thinking

- Identify and list the steps of a known task in order
- Understand that we control computers by giving them instructions
- Create a simple program e.g. to control a floor robot
- Understand what an algorithm is
- Create a simple algorithm
- Identify and explain patterns in groups of objects
- Debug an error in a simple algorithm or program e.g. for a floor robot
- Predict the outcome of a simple algorithm or program
- Understand that computers have no intelligence and we have to program them to do things
- Understand that the order of instructions in an algorithm is important
- Understand that instructions in an algorithm need to be clear and unambiguous
- Evaluate the success of an algorithm or program
- Identify and correct errors in a given algorithm or program (debugging)
- Use the language “if...then” to describe the relationship between 2 actions

Online Safety and Digital Literacy

- Understand that you can share digital content online
- Understand what personal information is and the need to keep it private
- Know who to tell if concerned about content or contact online
- Understand that digital content belongs to the person who first created it
- Save and reused digital content found online
- Understand why we use passwords
- Can remember a simple password and know not to tell anyone
- Understand what makes a good online friend and the need to be kind and thoughtful online as in the real world
- Can identify rules to add to an acceptable use policy for the class
- Understand that spending a long time in front of a computer screen can be unhealthy
- Understand that when we share content online, we might not be able to delete it
- Know that not all information found online is true
- Understand that the digital content we make belongs to us and others need to ask permission to use it

Self-image and identity

- I can recognise that there may be people online who could make me feel sad, embarrassed or upset
- If something happens that makes me feel sad, worried, uncomfortable or frightened I can give examples of when and how to speak to an adult I can trust

Online relationships

- I can use the internet with adult support to communicate with people I know
- I can explain why it is important to be considerate and kind to people online

Online reputation

- I can recognise that information can stay online and could be copied
- I can describe what information I should not put online without asking a trusted adult first

Online bullying

- I can describe how to behave online in ways that do not upset others and can give examples

Managing online information

- I can use the internet to find things out
- I can use simple keywords in search engines
- I can describe and demonstrate how to get help from a trusted adult or helpline if I find content that makes me feel sad, uncomfortable, worried or frightened

Health, well-being and lifestyle

- I can explain rules to keep us safe when we are using technology both in and beyond the home
- I can give example of some of these rules

Privacy and security

- I can recognise more detailed examples of information that is personal to me (e.g. where I live, my family's names, where I go to school)
- I can explain why I should always ask a trusted adult before I share any information about myself online
- I can explain how passwords can be used to protect information and devices

Copyright and ownership

- I can explain why work I create using technology belongs to me
- I can say why it belongs to me (e.g. it is my idea/ I designed it)
- I can save my work so that others know it belongs to me e.g. filename/name on content

Year 2

Pupils in Year 2 should be taught these skills discretely and cross curricularly.

What is a computer?

- Name a range of digital devices
- Explain what the basic parts of a computer are used for e.g. mouse, screen, keyboard
- Understand that you can find information from a website
- Use a simple password when logging on, where relevant
- Understand that you can share digital content
- Recognise and use a range of input devices, e.g. mouse, keyboard, microphone, touchscreen
- Recognise and use a range of devices that contain computers, e.g. washing machine, car, laptop
- Know where to save and open work
- Understand that you can use a search engine to find information using keyword searches
- Understand that all devices, programs, websites, apps and games are designed and manufactured by real people to fulfil specific tasks

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- Plan out digital content
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- Talk about what makes digital content good or bad
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- Recognising an error in a branching database
- Create a branching database using pre-prepared images and questions
- Find out similar information in different formats, e.g. text, video, audio
- Explain how different formats communicate information and their benefits
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- Evaluate a given branching database and suggest improvements
- Understand that the questions you ask are important, when collecting data

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- Know who to tell if concerned about content or contact online
- Understand that digital content belongs to the person who first created it
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- Can remember a simple password and know not to tell anyone
- Understand what makes a good online friend and the need to be kind and thoughtful online as in the real world
- Can identify rules to add to an acceptable use policy for the class
- Understand that spending a long time in front of a computer screen can be unhealthy
- Understand that when we share content online, we might not be able to delete it
- Know that not all information found online is true
- Understand that the digital content we make belongs to us and others need to ask permission to use it

Self-image and identity

- I can explain how other people’s identity online can be different to their identity in real life
- I can describe ways in which people make themselves look different online
- I can give examples of issues online that might make me feel sad, worried, uncomfortable or frightened: I can give examples of how I might get help

Online relationships

- I can use the internet to communicate with people I don’t know well (e.g. email a penpal in another school/country)
- I can give examples of how I might use technology to communicate with others I don’t know well

Online reputation

- I can explain how information put online about me can last for a long time
- I know who to talk to if I think someone has made a mistake about putting something online

Online bullying

- I can give examples of bullying behaviour and how it could look online
- I understand how bullying can make someone feel
- I can talk about how someone can/would get help about being bullied online or offline

Managing online information

- I can use keywords in search engines
- I can demonstrate how to navigate a simple webpage to get information I need (e.g. home, forward, back buttons; links tabs and sections)
- I can explain what voice activated searching is and how it might be used (e.g. Alexa, Google Now, Siri)
- I can explain the difference between things that are imaginary, 'made up' or 'make believe' and things that are 'true' or 'real'
- I can explain why some information I find online may not be true

Health, well-being and lifestyle

- I can explain simple guidance for using technology in different environments and settings
- I can say how those rules/guides can help me

Privacy and security

- I can describe how online information about me could be seen by others
- I can describe and explain some rules for keeping my information private
- I can explain what passwords are and can use passwords for my accounts and devices

Copyright and ownership

- I can describe why other people's work belongs to them
- I can recognise that content on the internet may belong to other people