

Cambridgeshire Progression in Computing Capability

Online safety:

Purpose of study ~ Computing programmes of study: Key stages 1 and 2

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming.

Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

Aims:

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

- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- are responsible, competent, confident and creative users of information and communication technology.

Theme Overview: Online Safety

"New technologies are integral to the lives of all children, young people and their parents. They inspire children to be creative, communicate and learn. It is essential that children and young people tap into the potential of the digital world if they are to enjoy their childhood and succeed in life. In educating children and young people we should empower them to learn how to use digital technology responsibly, not simply block what they can access. We must give them the information and skills they need to be digitally literate and savvy users. This enables them to take advantage of the opportunities that new technologies can offer, as well as being able to deal with any risks that arise."

Professor Tanya Byron

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	Early Capability		Middle Capability		Later Capability	
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
National Curriculum	<ul style="list-style-type: none"> Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies. 		<ul style="list-style-type: none"> Use technology safely, respectfully and responsibly; recognise acceptable / unacceptable behaviour; identify a range of ways to report concerns about content and contact. 			
Cambridgeshire Capability Statements	<p>Pupils are becoming increasingly aware of content, contact and conduct benefits and risks, how to manage them safely and where to go for help and support when they have concerns or feel unsafe, worried or upset.</p> <p>They are beginning to develop a better understanding of their own and others' 'identity' (including online), the importance of keeping personal information private and of seeking permission before sharing. They check with an adult before clicking on pop ups, notifications or dialogue boxes.</p> <p>They increasingly use a range of digital devices to communicate safely and respectfully online, making links to positive behaviour in the physical world.</p>		<p>Pupils are able to identify a range of content, contact and conduct benefits and risks, describe how to manage them safely and respectfully and know where to go for help and support when they have concerns.</p> <p>They can explain what is meant by 'identity', how this might be represented differently in different situations and why others might mis-represent their identity. They develop their understanding of 'trust' and the importance of being careful about what is shared online and of giving and gaining consent.</p> <p>Pupils can describe positive and negative effects of online activity / behaviours and begin to understand how to make safer and healthier decisions, including considering the appropriateness of games and online content for different ages.</p> <p>Pupils can describe positive ways for someone to interact with others online and understand how this will positively impact on how others perceive them.</p>		<p>Pupils identify and manage the benefits and risks of a range of online activities in terms of content, contact and conduct to ensure they are safe, respectful and responsible online. They know how to report concerns, seek support for themselves and others and persist until they get the help they need.</p> <p>Pupils make responsible choices about their own online identity and consider the potential impact of this on their digital footprint. They understand that online identities can be copied or modified and some of the possible implications of this.</p> <p>They can describe times when they might responsibly share personal information (including payment details), the importance of seeking permission and the need for strong passwords.</p> <p>They can describe ways technology may impact their own and others' physical and mental wellbeing (positively and negatively), understand their responsibilities in regard to this and can suggest a range of positive strategies to limit the negative impact of technology and online behaviours.</p>	
<p>The above online safety statements have been created with reference to previous Cambridgeshire statements, the Cambridgeshire PSHE Digital Lifestyles curriculum (2020) and Education for a Connected World. For schools looking for more detailed outcomes for individual year groups, please refer to Education for a Connected World and Cambridgeshire's phase overview documents.</p>						