Dawn House School:
Computing Progression Map

Engage, Develop, Communicate, Aspire

(D1 - D9) Primary 1:	(D1 - D9) Primary 2:	(D1 - D9) Junior:
Understanding Technology: • Recognizing and naming common technological devices and tools, such as computers, tablets, and smartphones. • Exploring the basic functions of technology devices, including turning them on and off. **Digital Literacy:** • Developing awareness of different types of digital media, such as images, videos, and audio recordings. • Understanding how to interact with digital content, including using touchscreens and navigating simple interfaces. **Mouse and Keyboard Skills:** • Developing basic motor skills to operate a mouse or trackpad, including clicking and dragging objects. • Introducing keyboard awareness, such as pressing keys to make letters or numbers appear on the screen. **Creative Expression:** • Engaging in digital creative activities, such as drawing simple pictures using digital tools. • Exploring cause-and-effect relationships through interactive digital experiences, such as simple games or multimedia applications. **Problem Solving and Exploration:** • Investigating and experimenting with digital tools and programs to discover their functions and capabilities. • Solving simple problems encountered during digital activities, such as finding and selecting a desired item on the screen.	**Basic Computer Operation:** • Turning on and off a computer or tablet device independently. • Using a mouse or trackpad to navigate the screen and select objects. **Keyboard Familiarity:** • Identifying and locating letters and numbers on a keyboard. • Typing simple words or short sentences using the keyboard. **Digital Literacy:** • Recognizing different types of digital media, such as images, videos, and text. • Understanding how to interact with digital content, including clicking, dragging, and scrolling. **Introduction to Coding Concepts:** • Exploring basic coding concepts such as sequences and algorithms. • Using coding apps or programs designed for early learners to create and execute simple commands or instructions. **Creative Expression:** • Engaging in digital creative activities, such as drawing pictures using digital tools. • Exploring digital storytelling by sequencing images or adding text to digital pictures. **Problem Solving and Critical Thinking:** • Solving simple problems encountered during digital activities, such as troubleshooting when an app or program does not work as expected.	**Computer Basics:** • Demonstrating an understanding of basic computer terminology, such as desktop, icon, file, and folder. • Using a mouse or trackpad to click, drag, and drop objects on the screen. **Keyboard Proficiency:** • Typing simple words and sentences using the keyboard with increasing accuracy and speed. • Understanding basic keyboard shortcuts for common actions, such as copying and pasting. **Digital Literacy:** • Recognizing and understanding different types of digital media, including images, videos, and text. • Navigating digital content using hyperlinks and interactive elements. **Introduction to Coding Concepts:** • Exploring fundamental coding concepts such as sequences, loops, and conditionals through interactive activities and games. • Using coding apps or programs designed for early learners to create simple programs and animations. **Creative Expression:** • Creating and editing digital artwork using drawing and painting tools. • Using digital storytelling tools to sequence images, add text, and create simple narratives. **Problem Solving and Critical Thinking:** • Solving basic problems encountered during digital activities, such as debugging simple programs or troubleshooting technical issues.

Online Safety Awareness:
- Developing understanding of basic online safety concepts, such as not sharing personal information online and seeking help from trusted adults when encountering unfamiliar or uncomfortable situations.
- Exploring digital content in a safe and supervised environment.

Collaboration and Communication:
- Participating in digital activities that involve sharing and exchanging ideas with peers, such as collaborative drawing or storytelling projects.
- Exploring basic communication tools, such as sending and receiving digital messages or participating in virtual discussions.

Understanding Sequences and Patterns:
- Recognising and creating simple sequences and patterns using digital tools, such as arranging objects in a specific order.
- Exploring basic concepts of algorithms and instructions through simple sequencing activities.

Exploring Digital Environments:
- Engaging with digital environments and virtual worlds designed for early learners.
- Navigating digital spaces and interfaces with support, such as selecting options from menus.

Understanding Data and Information:
- Exploring basic concepts of data and information, such as identifying different types of digital content and understanding that information can be stored and retrieved using technology.
- Recognising simple symbols and icons used in digital interfaces to represent actions or concepts.

- Developing critical thinking skills by predicting and testing outcomes in digital environments.

Introduction to Online Safety:
- Learning basic online safety rules and guidelines, such as not sharing personal information online.
- Exploring digital content in a safe and supervised environment, with guidance on appropriate online behaviour.

Introduction to Data Handling:
- Exploring basic concepts of data and information, such as understanding that digital content can be stored and retrieved using technology.
- Sorting and categorizing digital objects or images based on simple criteria.

Understanding Technology Use:
- Exploring different uses of technology in daily life, such as communication, entertainment, and learning.
- Recognizing and discussing the benefits and limitations of using technology for various purposes.

Collaboration and Communication:
- Participating in digital activities that involve sharing and exchanging ideas with peers, such as collaborative drawing or storytelling projects.
- Exploring basic communication tools, such as sending and receiving digital messages or participating in virtual discussions.

- Predicting and testing outcomes in digital environments to develop critical thinking skills.

Introduction to Online Safety:
- Understanding the importance of online safety rules and guidelines, such as not sharing personal information online and reporting inappropriate content.
- Applying strategies for safe and responsible use of digital devices and online resources.

Data Handling and Organization:
- Sorting and categorizing digital objects or images based on multiple criteria.
- Understanding basic concepts of file organization and management, such as creating folders and organizing files.

Understanding Technology Use:
- Exploring different uses of technology in various contexts, such as education, entertainment, and communication.
- Recognizing and discussing the impact of technology on daily life and society.

Collaboration and Communication:
- Participating in digital activities that involve sharing and collaborating with peers, such as creating collaborative presentations.
- Using digital communication tools, such as email or messaging apps, to communicate with classmates or teachers.

(D9 - D11) Key Stage 3:	(D11 - D13) Key Stage 4:
Computer Operation Proficiency: • Navigating operating systems and user interfaces with confidence, including opening, saving, and closing files. • Understanding basic system settings and preferences, such as screen resolution and volume control.	**Advanced Computer Operation:** • Demonstrating proficiency in using a range of software applications and tools, including word processing, presentation software and spreadsheets. • Understanding and customizing system settings and preferences to suit individual needs.
Keyboard Skills: • Typing accurately and efficiently using the keyboard, including using correct finger placement and touch typing techniques. • Demonstrating proficiency in using keyboard shortcuts for common actions and commands.	**Touch Typing Mastery:** • Typing accurately and efficiently using touch typing techniques • Demonstrating fluency in using keyboard shortcuts and commands for productivity and efficiency.
Digital Literacy and Internet Use: • Understanding how to search for and access information online using search engines and web browsers. • Recognizing and evaluating the reliability and credibility of online sources.	**Digital Literacy and Information Literacy:** • Evaluating and critically analysing digital information from a variety of sources, including websites, online databases, and multimedia resources. • Applying strategies for verifying the accuracy, reliability, and credibility of digital information.
Introduction to Coding and Programming: • Exploring coding concepts such as variables, loops, and events through block-based programming environments. • Writing and debugging simple programs using visual programming languages or coding platforms designed for early learners.	**Coding and Programming Skills:** • Programming and debugging more complex algorithms and scripts using text-based programming languages • Developing and testing software applications or digital projects using programming principles and best practices.
Creative Digital Media: • Creating and editing digital media projects, such as multimedia presentations, digital artwork, or simple animations. • Using digital tools and software to enhance and manipulate images, audio, and video content.	**Creative Digital Media Production:** • Producing and editing multimedia projects with a high level of creativity and technical skill, including digital artwork, videos, animations, and interactive presentations. • Using advanced digital tools and software to enhance and manipulate digital media content.
Problem Solving and Computational Thinking: • Applying computational thinking skills to solve problems and design solutions in digital environments. • Decomposing problems into smaller, manageable parts and developing step-by-step algorithms to solve them.	**Problem Solving and Computational Thinking:** • Applying computational thinking skills to solve complex problems and design solutions in digital environments. • Decomposing problems into smaller, more manageable parts and developing algorithms and procedures to address them.
Online Safety and Responsible Use: • Understanding the importance of online safety practices, including protecting personal information, avoiding cyberbullying, and reporting inappropriate content. • Applying strategies for safe and responsible use of digital devices and online resources, both at school and at home.	**Cybersecurity Awareness and Online Safety:** • Understanding and implementing cybersecurity best practices to protect personal data, devices, and digital identities. • Recognizing and responding to cybersecurity threats, such as malware, phishing attacks, and online scams.

Data Handling and Analysis:
- Collecting, organizing, and analysing data using digital tools and software, such as spreadsheets or databases.
- Understanding basic data visualization techniques, such as creating charts and graphs to represent data.

Collaboration and Communication Skills:
- Participating in collaborative digital projects with peers, including sharing and editing documents, presentations, and other digital artifacts.
- Using digital communication tools, such as email, messaging apps, or online forums, to communicate and collaborate with classmates and teachers.

Understanding Technology and its Impact:
- Exploring the uses and applications of technology in various contexts, such as education, entertainment, healthcare, and the workplace.
- Discussing the impact of technology on society and considering ethical and social implications of technology use.

Data Handling and Analysis:
- Collecting, processing, and analysing large datasets using advanced data analysis tools and techniques.

Collaborative Digital Project Management:
- Leading and managing collaborative digital projects from inception to completion, including planning, organizing, and delegating tasks.
- Communicating and collaborating effectively with team members using digital project management tools and platforms.

Ethical and Responsible Technology Use:
- Understanding ethical issues and dilemmas related to technology use, such as privacy, intellectual property, and digital rights.
- Applying ethical principles and guidelines to make responsible decisions about technology use and digital behaviour.

(D13 - D16) Key Stage 5:

Advanced Computer Skills:
- Demonstrating proficiency in using a wide range of software applications and tools for productivity, creativity, and communication.
- Understanding and customising system settings and preferences to optimise performance and user experience.

Coding and Programming Proficiency:
- Writing and debugging programs and scripts using text-based programming languages
- Applying computational thinking skills to solve complex problems and develop software applications or digital projects.

Digital Literacy and Information Literacy:
- Critically evaluating and analysing digital information from diverse sources, including websites, online databases, and social media platforms.
- Applying strategies for verifying the accuracy, reliability, and credibility of digital information and media.

Creative Digital Media Production:
- Producing and editing multimedia projects with advanced creativity and technical skill, including digital artwork, animations, videos, and interactive presentations.
- Using professional-grade digital tools and software to enhance and manipulate digital media content.

Advanced Data Handling and Analysis:
- Collecting, processing, and analysing large datasets using advanced data analysis tools and techniques.

Cybersecurity Awareness and Digital Citizenship:
- Understanding the principles and practices of cybersecurity, including threat detection, prevention, and response.
- Practicing responsible digital citizenship by respecting privacy, intellectual property, and ethical norms in online interactions and behaviour.

Introduction to Computer Science Concepts:
- Exploring foundational concepts in computer science, such as algorithms, data structures, and computational thinking.
- Understanding the principles of computer architecture, including hardware components, operating systems, and networks.

Collaborative Digital Project Management:
- Collaborating effectively with peers to plan, organize and execute collaborative digital projects.
- Communicating and coordinating project activities using digital project management tools and platforms.

Ethical and Social Implications of Technology:
- Investigating and analysing the ethical, social, and environmental impacts of technology use and innovation.
- Considering the ethical dilemmas and responsibilities of technology developers, users, and stakeholders.

Preparation for Further Study and Careers in Computing:
- Developing skills and knowledge necessary for further study in computing-related fields.
- Exploring career pathways and opportunities in the field of computing and technology.