

Tavistock Primary and Nursery school
Computing in the Early Years

The EYFS framework is structured very differently to the national curriculum as it is organised across seven areas of learning rather than subject areas. The aim of this document is to help subject leaders to understand how the skills taught across EYFS feed into national curriculum subjects.

This document demonstrates which statements from the revised 2021 Development Matters are prerequisite skills for computing within the national curriculum. The table below outlines the most relevant statements taken from the Early Learning Goals in the EYFS statutory framework and the Development Matters age ranges for Three and Four-Year-Olds and Reception to match the computing overview for computing. (The two-three year old statements will be added once finalised by EYFS lead)

The most relevant statements for computing are taken from the following areas of learning:

- Personal, Social and Emotional Development
- Physical Development
- Understanding the World
- Expressive Arts and Design

In planning and guiding what children learn, practitioners must reflect on the different rates at which children are developing and adjust their practice appropriately, referring to the Characteristics of Effective Teaching and Learning

Computing-Linked to TPNS EYFS curriculum overviews		
Two-Year-Olds	Personal, Social and Emotional Development	7.They are beginning to try new things. 10.Starting to show effortful control .e.g. Waiting for their turn. They are aware of rules/boundaries. 16.Beginning to learn about being 'Ready, Respectful and safe'. : for example 'kind hands', 'walking feet'.
	Physical Development	2. Beginning to develop manipulation and control. (through playdough, threading, puzzles etc.) 15 Beginning to match their developing physical skills to tasks and activities in Nursery. For example, they decide whether to crawl, walk or run across a plank,
	Understanding the World	1. Repeat actions that have an effect. (Exploring how things work) 9. Explore how things work. (problem solving & science experiments)
Three and Four-Year-Olds	Personal, Social and Emotional Development	15. I understand and can apply the rules at nursery and I know how to behave in different contexts outside of nursery
	Physical Development	32. Match their developing physical skills to tasks and activities in the setting.
	Understanding the World	Explore how things work: 19.I am experimenting within my play to find ways to change how objects move e.g. faster, slower 30.I can test my own ideas/ evaluate what has happened and talk about what I would do differently next time 24.I can use some language to describe how materials can change e.g. melting ice 22. I can talk about/describe what I see, hear or feel e.g. materials 20.I can talk about how objects float or sink 21.I can use language to describe the processes when baking 25.I am beginning to predict what I think might happen
Reception	Personal, Social and Emotional Development	1.Show resilience and perseverance 4.Children can share the resources with peers and adults. 22.To understand and demonstrate appropriate screen time habits. 13.To follow and understand class and school rules.
	Physical Development	4.To use a range of tools with care, safety and control. 19.Demonstrate care and safety for equipment and apparatus.

TPNS Computing in the Early Years 2023-24

Understanding the World	<p>4.To navigate around our local environment using simple instructions.</p> <p>10.To be able to draw a simple map and use relevant language to describe it.</p> <p>14.Become familiar with logging into and out of a device.</p> <p>15.To be able to take a photo/video using available technology.</p> <p>17.To be able to use unplugged activities to help with children’s understanding eg instructions on how to make a sandwich.</p> <p>25.Using floor turtles for directional awareness.</p>
Expressive Arts and Design	<p>Explore, use and refine a variety of artistic effects to express their ideas and feelings.</p> <p>24.To explain the processes used to make a piece of Art.</p>

These are: **playing and exploring** – children investigate and experience things, and ‘have a go’; **active learning** – children concentrate and keep on trying if they encounter difficulties, and enjoy their achievements for their own sake; **creating and thinking critically** – children have and develop their own ideas, make links between ideas, and develop strategies for doing things.

In addition, the Prime Areas of Learning (Personal, Social and Emotional Development, Communication and Language and Physical Development) underpin and are an integral part of children’s learning in all areas.

Continuous Provision – available throughout the day for both focussed and self-chosen learning

A range of technology is available in the classroom for children to access both independently and with an adult.

- Tablets
- Interactive Whiteboard
- Laptop

To purchase:

- Remote controls
- Battery operated toys

Outdoor Learning

- Children to take Tablets/cameras on walks/outdoor play/outdoor lessons/ Garden day to record their own learning.
- Children to use Tablets to sequence their daily activities and present this to the class.

Vocabulary

Algorithm: Steps to follow to achieve a task.

Application (App): A program (such as a word processor or a spreadsheet) that performs one of the important tasks for which a computer is used

Button: In computing, the term button refers to any graphical control element that provides the user a simple way to trigger an event.

Camera: A digital camera is a hardware device that takes photographs and stores the image as data on a memory card.

Computer: A device that takes input, processes it, then produces output.

Control: In general, control refers to the ability to manage, organise, or run something on a computer.

Emoji: The use of icons or text to portray mood or facial expression, e.g. :) when happy and :(when sad.

Google: Is one of a number of search engines that help us find information on the web.

Information: Data processed and/or presented to users in a meaningful way.

Instructions: Computer instructions are a set of steps.

Internet: The global collection of computer networks and their connections, all using shared protocols (TCP/IP) to communicate.

iPad/tablet: The iPad and tablets are a type of hand held computer.

Keyboard: A board of keys. One of the primary input devices used with a computer.

Printer: A printer is an external hardware output device that takes the electronic data stored on a computer or other device and generates a hard copy of it.

QR Code: A QR code (short for "quick response" code) is a type of barcode that contains a matrix of dots. It can be scanned using a QR scanner or a smartphone with built-in camera.

Robot: Robots have a reprogrammable brain (a computer) that moves a body.

Save: Save is the process of writing data to a storage medium, such as a floppy disk, CD-R, USB flash drive, or hard drive.

Sequence: A set of instructions that are followed in order.

Share: Sharing is the practice of sharing or offering access to digital information or resources, including documents, multimedia (audio/video), graphics, computer programs, images and e-books.

Technology: Technology is the skills, methods, and processes used to achieve goals.

Zoom: To cause text or other graphics in a window or frame to appear larger on the screen.

Role of the adult:

Key Questions – provide opportunities to develop curiosity, where adults can model questions and children can ask questions.

What is it like?

Can you show me...?

Can you tell me about...?

Can you tell me which...?

Can you describe...?

What’s happening?

What’s happening here?

What happens when you...?

Why it happened?

Why did...?

Why do you think...?

Why do you think... is happening/happened?

Can you tell me why...?

Tell me why...?

What could we do next?

I wonder if...?

What if...?

What will happen if we...?

How can you make...?

How can you show...?

How could we find out if...?

Can you find another way that will...?

Can you think of another way...?

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<p>Can you tell me what...? How does that work? What did you notice when you...?</p> <p><i>Compare and contrast:</i> What is the same about...? What is different...? Which ones...?</p>		<p>How could we improve...? Can you create/invent/design...?</p>
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