

Seaholme Primary School

Digital Learning Model

What are digital technologies?

Digital technologies are the digital devices, tools, applications and systems that students and teachers use for learning and teaching; this includes Department-provided software and locally-sourced devices, tools and systems.

What is digital learning?

Digital learning is any type of learning that is facilitated by technology and any instructional practice that effectively uses technology to strengthen and/or transform the learning experience. Digital learning occurs across all learning areas and domains, and encompasses the application of a wide spectrum of practices including:

- blended and virtual learning
- game-based learning
- accessing digital content
- collaborating locally and globally
- assessment and reporting online
- active participation in online communities
- using technology to connect, collaborate, curate and create.

Our Digital Learning Vision

To create an environment where technology is accessible, encouraged and used for engagement. We want to see our students working together, creating, learning and growing by using digital technologies as a tool.

Purpose of the Digital Learning Model

Our goal is to prepare students for an ever-evolving world where digital technology is accessible, encouraged and embedded in everything we do. Teaching our students to be safe, respectful, responsible and resilient online is a priority for the Seaholme community. We will partner with Seaholme families to create safe digital environments at school and home. We will implement a Digital Learning model that creates a learning environment where technology enhances learning, motivation, authenticity and engagement. We want to see our students using digital technology when collaborating, communicating, creating, learning and growing together. We want to set up students for success in a digital world.

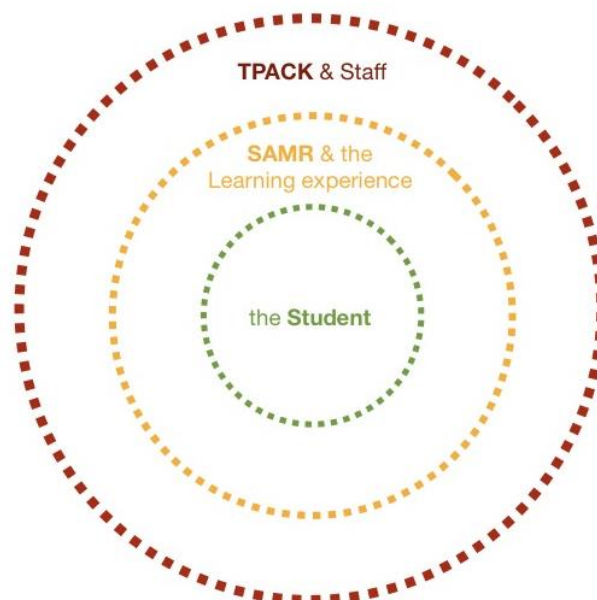
The purpose of the Digital Learning Model at Seaholme Primary is to inform both teachers and parents about:

- How technology is used and implemented.
- What Digital Learning looks like in the classroom.
- When these skills will be taught?
- Why we have taken this approach at Seaholme Primary School?

Just as the technology we use is always evolving, so is the way we use it in educating our students.

Our Digital Learning Pedagogy

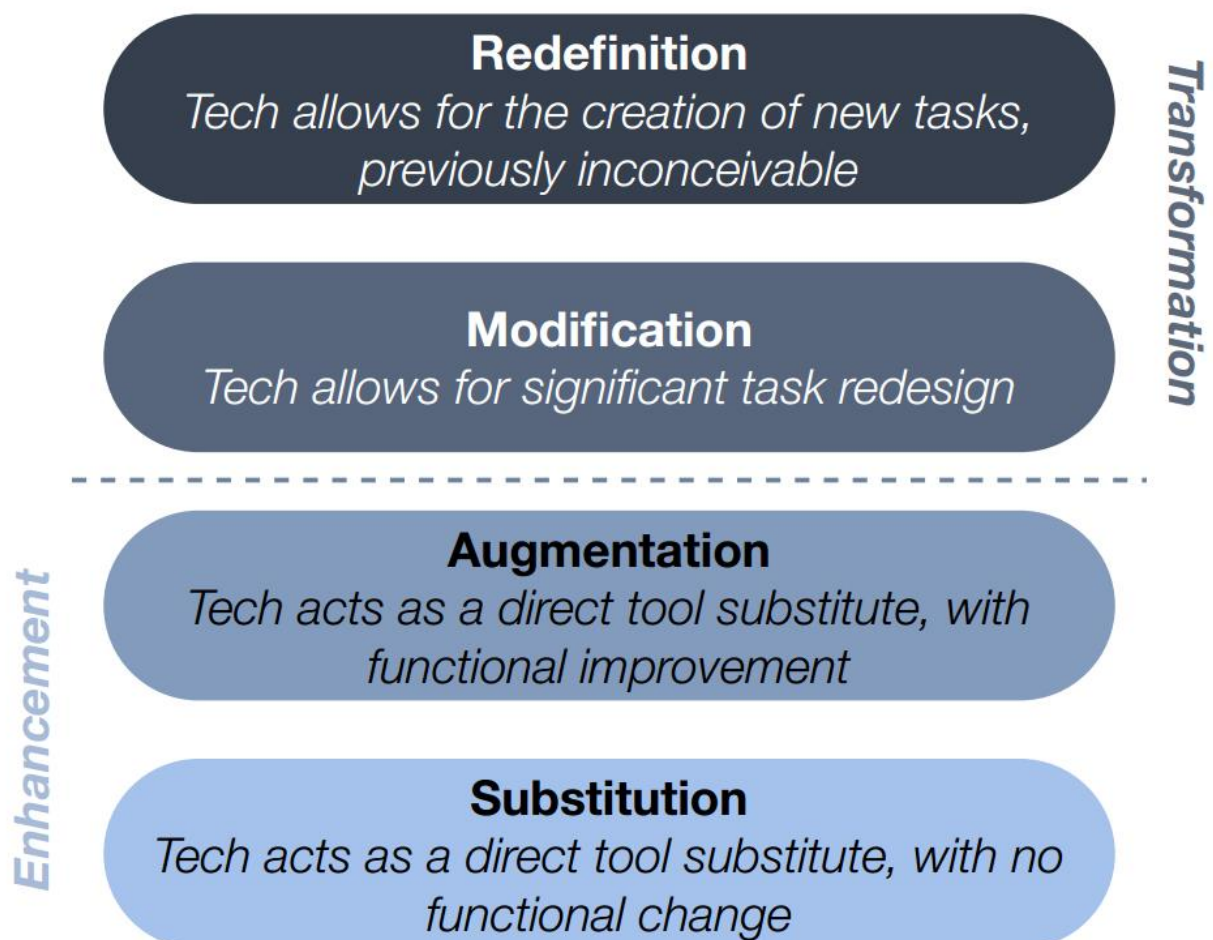
Our method and practice of digital technology implementation at Seaholme Primary School has three layers. These layers see the student learning process at the core of what we do. This is then supported by the SAMR model (refer below) and the learning experience which increases both the student and teacher awareness of the purpose and use of technology within the core curriculum areas. The 3rd layer focuses on ensuring teacher technological, pedagogical and content knowledge (TPACK) are connected at a high level to enhance the learning experience, engagement and understanding. Below are details of the three layers and where they sit in relation to each other.



Reflection of learning experience (SAMR)

The **S**ubstitution **A**ugmentation **M**odification **R**edefinition Model offers a method of seeing how computer technology might impact teaching and learning. It also shows a progression that adopters of educational technology often follow as they progress through teaching and learning with technology.

While one might argue over whether an activity can be defined as one level or another, the important concept to grasp is the level of student engagement. One might well measure progression along these levels by looking at who is asking the important questions. As one moves along the continuum, digital technology becomes more important in the classroom but at the same time becomes more invisibly woven into the demands of good teaching and learning.



Effective Pedagogical Practice (TPACK)

Technological pedagogical content knowledge (**TPACK**) is a framework to understand and describe the kinds of knowledge needed by a teacher for effective pedagogical practice in a technology enhanced learning environment.

The TPACK framework looks at the relationships between technology, pedagogy, and content. A teacher capable of negotiating these relationships represents a form of expertise different from, and (perhaps) broader than, the knowledge of a disciplinary expert (say a scientist or a musician or sociologist), a technology expert (a computer engineer) or an expert at teaching/pedagogy (an experienced educator).

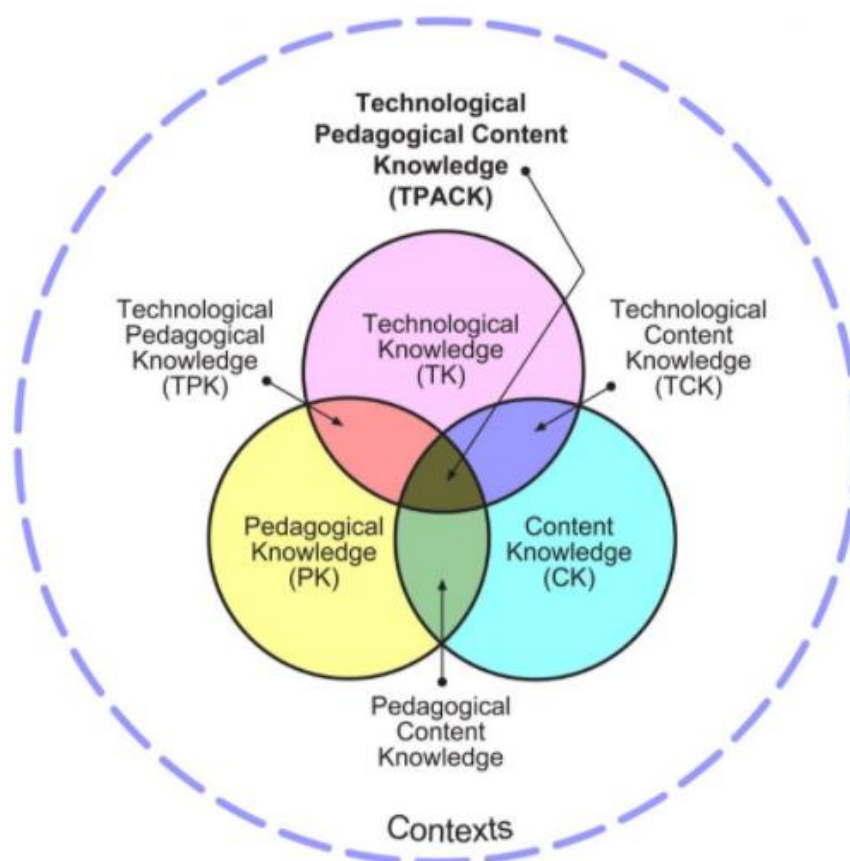


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Seaholme Primary's Digital Technology Model

Foundation-2 Model

In 2023 within the early years (Foundation to Grade 2) at Seaholme Primary School we will use a 1:3 school based iPad model.

Two trollies of 30 iPads can be booked by classroom teachers, which they can utilise in various ways, such as during whole class or small groups instruction. In these years there are large portions of substitution and augmentation occurring as the technology is used to reinforce fundamental skills across Numeracy and Literacy.

3/4 Model

Year 3/4 is the first stage of our 1:1 iPad program. Students are expected to bring their school iPad to school every day, fully charged. The school will be in control of the iPads and make all necessary Apps accessible to the students. A large portion of these apps will be used throughout the next 3 to 4 years of the student's time at Seaholme Primary. Each student must sign a user agreement which is in-line with the school's Digital Technologies and Acceptable Use Policy. Students will utilise their devices across a broad range of curriculum areas, including our specialist programs.

5/6 Model

In 2023, Year 5/6 will work with 1:3 iPad program. In 2024, we will start the second stage of the 1:1 iPad program. Technology is well embedded in all things the students undertake and provides a focus of differentiation and personalisation. Students look to make design and creation decisions based around the tools at their fingertips. Teachers create the scope for students to individualise their learning, while still holding traditional skills and values at heart.

Seaholme Primary School Digital Learning Expectations

Seaholme Primary School prides itself in providing its students with modern learning opportunities. The school's Digital Learning Model sets out what we as a school expect of our students and teachers.

Expectations of Leading Teachers/Principals:

- Provide all teachers with varied opportunities in varied environments and time slots to undertake professional development to establish an understanding of the Minimum Core Teaching Standards (see below). This could be within school hours as

release to observe or 'level up' their own skills by team-teaching, before/during/after school in-house PD or out of school PD offered by professionals in other contexts or teaching environments.

Expectations of Professional Learning Teams:

- All planning documents incorporate digital learning, where applicable.
- As a group, teacher teams discuss and plan for the implementation of digital technologies within the classroom.

Expectations of teachers:

- Regularly use the classroom's display LCD as a visual teaching tool to model iPad use, share tasks and progress of students and demonstrate learning and achievements.
- iPad use must be regularly implemented in all learning areas, such as Numeracy, Literacy and Science, as well as Specialist areas where applicable.
- Have a fundamental understanding of how to use screen mirroring technology.
- Have a fundamental understanding of how to use the apps on the school's app lists.
- Engage in regular professional development in the use of iPads and classroom integration of digital technology. This may be determined/directed by the Principal if deemed necessary in order to establish the Minimum Core Teaching standards (see below).
- Provide students with ongoing opportunities to use digital technologies in all learning environments.
- Use a word processor or other application to create resources.
- Know who to seek out for assistance when 'trouble shooting' and actively access these people.
- Link personal Professional Development Plan goals to areas where Minimum Core standard requires attention, or that relates to the school's Strategic Plan and Annual Implementation Plan.

Expectations of students:

- Engage respectfully and responsibly with all digital technology.
- Follow the expectations outlined in Seaholme Primary's 1:1 Acceptable User Agreement and Digital Technologies and Acceptable Use Policy.

Essential Digital Technology Literacy (Minimum Core Teaching Standards)

All teachers MUST be able to demonstrate the following, to and with students:

- Ability to customise and personalise digital learning.
- Ability to explore deeper, searching for a broad range information.
- Ability to connect to others while collaborating in selected tasks.


- Researching through the use of the internet for required information.
- Ability to evaluate digital resources.
- An understanding of the use of search engines.
- The use of online mapping.
- Ability to access videos, podcasts and online feeds for learning purposes.
- Ability to use a variety of closed learning platforms.
- Understanding of blogging etiquette and purpose.
- Ability to locate relevant resources on the internet.
- Ability to use the Internet browser history.

Victorian Curriculum Foundation to 10 (Technologies – Digital Technologies)

The Digital Technologies curriculum aims to ensure that students can:

- design, create, manage and evaluate sustainable and innovative digital solutions to meet and redefine current and future needs
- use computational thinking and the key concepts of abstraction; data collection, representation and interpretation; specification, algorithms and development to create digital solutions
- apply systems thinking to monitor, analyse, predict and shape the interactions within and between information systems and the impact of these systems on individuals, societies, economies and environments
- confidently use digital systems to efficiently and effectively automate the transformation of data into information and to creatively communicate ideas in a range of settings

- apply protocols and legal practices that support safe, ethical and respectful communications and collaboration with known and unknown audiences.

Foundation to Level 2	Levels 3 and 4	Levels 5 and 6
Foundation to Level 2 Content Descriptions	Levels 3 and 4 Content Descriptions	Levels 5 and 6 Content Descriptions
Digital Systems	Digital Systems	Digital Systems
Identify and explore digital systems (hardware and software components) for a purpose (VCDTDS013)	Explore a range of digital systems with peripheral devices for different purposes, and transmit different types of data (VCDTDS019)	Examine the main components of common digital systems, and how such digital systems may connect together to form networks to transmit data (VCDTDS026)
Data and Information	Data and Information	Data and Information
Recognise and explore patterns in data and represent data as pictures, symbols and diagrams (VCDTDI014)	Recognise different types of data and explore how the same data can be represented in different ways (VCDTDI020)	Examine how whole numbers are used as the basis for representing all types of data in digital systems (VCDTDI027)
Collect, explore and sort data, and use digital systems to present the data creatively (VCDTDI015)	Collect, access and present different types of data using simple software to create information and solve problems (VCDTDI021)	Acquire, store and validate different types of data and use a range of software to interpret and visualise data to create information (VCDTDI028)
Independently and with others create and organise ideas and information using information systems, and share these with known people in safe online environments (VCDTDI016)	Individually and with others, plan, create and communicate ideas and information safely, applying agreed ethical and social protocols (VCDTDI022)	Plan, create and communicate ideas, information and online collaborative projects, applying agreed ethical, social and technical protocols (VCDTDI029)
Creating Digital Solutions	Creating Digital Solutions	Creating Digital Solutions
Follow, describe and represent a sequence of steps and decisions (algorithms) needed to solve simple problems (VCDTCD017)	Define simple problems, and describe and follow a sequence of steps and decisions involving branching and user input (algorithms) needed to solve them (VCDTCD023)	Define problems in terms of data and functional requirements, drawing on previously solved problems to identify similarities (VCDTCD030)
Explore how people safely use common information systems to meet information, communication and recreation needs (VCDTCD018)	Develop simple solutions as visual programs (VCDTCD024)	Design a user interface for a digital system, generating and considering alternative design ideas (VCDTCD031)
	Explain how student-developed solutions and existing information systems meet common personal, school or community needs (VCDTCD025)	Design, modify and follow simple algorithms represented diagrammatically and in English, involving sequences of steps, branching, and iteration (VCDTCD032)
		Develop digital solutions as simple visual programs (VCDTCD033)
		Explain how student-developed solutions and existing information systems meet current and future community and sustainability needs (VCDTCD034)
Privacy statement Copyright statement Disclaimer Version history		

Student safety

When students are problem solving and creating and communicating information, they will apply skills and protocols to meet their legal, safety, cultural and ethical obligations and responsibilities. For example, protocols such as using acceptable language, acknowledging different cultural practices, and using passwords and privacy settings on social media sites are applied to increase the security of personal data and to respect participants in online environments.

Integrating the strands

Students draw on the content of the Data and Information, and Digital Systems strands when applying processes and technical skills pertaining to the Creating Digital Solutions strand. Within this strand, students apply the interrelated processes of analysing, designing, developing and evaluating to create digital solutions. The processes can be applied using an agile or sequential approach.

As problems become more complex, and solutions more sophisticated, it becomes increasingly necessary for students to develop skills in abstraction. Solutions may be developed using combinations of readily available hardware and software applications, and/or specific instructions provided through programming. Students may also engage in learning activities that do not require the full use of all of the processes. This means there is greater flexibility about when different content descriptions are introduced into the learning program within a band.

Connections with other curriculum areas

There are strong connections between Digital Technologies and some other discipline-based learning areas.

Digital Technologies and Mathematics

The Digital Technologies curriculum provides contexts within which mathematical understanding, fluency, logical reasoning, analytical thought and problem-solving skills can be applied and developed. In particular, computational thinking draws on mathematical understanding and skills. An understanding of data and data analysis skills will enhance students' abilities to analyse patterns and trends, and logical reasoning will support the design of algorithms.

Digital Technologies and Science

The Digital Technologies curriculum complements many aspects of the Science curriculum. Digital Technologies equips students with many techniques and skills for facilitating the collection, organisation, storage, analysis and presentation of qualitative and quantitative scientific data to enable evidence-based conclusions to be drawn from investigations. Digital Technologies enable students to use simulations and animations to support the development of their understanding of Science concepts and models, and to test predictions

about scientific phenomena that may be difficult to explore through first-hand investigations.

Digital Technologies and Geography

The Digital Technologies curriculum complements aspects of the Geography curriculum. In Digital Technologies, students learn how to collect, sort, validate, represent and manipulate data and information, as well as recognise patterns in datasets. These skills are applied in Geography, for example, when students develop spatial understandings through creating, interpreting and using maps, and collecting fieldwork data and processing them.

Digital Technologies and The Arts

The Digital Technologies curriculum complements aspects of The Arts curriculum, particularly with respect to design and using digital systems. In Digital Technologies, students engage in design thinking as part of the Creating Digital Solutions strand. These skills are also applied in The Arts as students generate alternative ideas, select and apply design principles and elements and sequence decisions and events. In Digital Technologies students learn about the functionality of a range of digital systems, and these skills are applied when transforming ideas into arts forms.