

# WORKING WITH ICT AT LLANSANNOR

Information, support and ideas for working with your children at home using iPads and other devices.

## AIMS OF THE WORKSHOP

To give you an insight of:

The ICT/iPad scheme of work we are currently using in school.

The development and progression of skills.

The use of iPads within school/what apps we use and why?

Introduction to HWB

Explore how the school teaches coding from Reception to Year 6

## CONTENT

The new scheme of work and the Digital Competence Frame Work (DCF)

Neapod

Tour of HWB

Tasks

Questions

### DIGITAL COMPETENCE FRAMEWORK (DCF)

Digital competence is one of 3 cross-curricular responsibilities, alongside literacy and numeracy. It focuses on developing digital skills which can be applied to a wide range of subjects and scenarios.

The Framework, which has been developed by practitioners from Pioneer Schools, supported by external experts, has 4 strands of equal importance, each with a number of elements.

#### Citizenship - which includes:

- Identity, image and reputation
- Health and well-being
- Digital rights, licensing and ownership
- Online behaviour and cyberbullying.

#### <u>Interacting and collaborating –</u> which includes:

- Communication
- Collaboration
- Storing and sharing.

#### <u>Producing – which includes:</u>

- Planning, sourcing and searching
- Creating
- Evaluating and improving.

### Data and computational thinkingwhich includes:

- Problem solving and modelling
- Data and information literacy.

#### **SKILLS & ACTIVITIES**

LINKS WITH DIGITAL
COMPETENCE FRAMEWORK
(CROSS CURRICULAR)

#### **Problem Solving**

#### **Data Recording and Representation**

Outcome 5 - gather and record data and extract and interpret information from a range of sources.

Outcome 6 - represent data using more complex methods, and extract and interpret information from data representations.

#### **Data Sorting and Grouping**

Outcome 5 - sort and classify using more than two criteria. Outcome 6 - sort and classify using more than two criteria, explain their reasoning in mathematical language and use sorting diagrams.

#### JIT Chart - Data Handling

Activity 1 - Pupils are able to add data to a table and create a variety of graphs. Demonstrate JIT Chart to the pupils. Show that the screen is made up of a table and a space for the graph on the right. Allow the pupils time to enter numbers into the table and watch the data appear on the selected graph. Show how you can add different types of graph - pie, bar, line and block. Use the graphs to extract and interpret information.

#### Data and Computational Thinking - 4.2 data and information literacy

- extract information from simple tables and graphs, e.g. answer questions on table graph.
- record data collected in a variety of suitable formats, e.g. lists, tables, block graphs and pictograms.

#### JIT Chart / Mix - Data Handling

Activity 2 - Pupils are able with support, to collect, enter and graph data on a suitable computer application and use to answer questions.

Conduct a class survey to gather 'real life' data, e.g. how pupils get school, favourite TV programs, food, etc. Pupils are to transfer the survey results into Chart. Talk about the type of graph that would be appropriate for them to use to display the results. Use JIT Mix to write about what they found out from the survey, e.g. We found out that more children like......than.....

#### **Modelling and Simulation**

Activity 3 - Pupils are able to use computer simulations and compare these to real life.

Examples:

CBBC - Get Building

CBBC - Prehistoric Park

BBC KS1 - Bitesize Science Activities

#### Data and Computational Thinking - 4.2 data and information literacy

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<b>KEY STAGE 2</b>
<b>PROGRAMME</b>
OF STUDY

#### **SKILLS & ACTIVITIES**

#### OPPORTUNITIES FOR ICT ASSESSMENT

## LINKS WITH DIGITAL COMPETENCE FRAMEWORK (CROSS CURRICULAR)

#### POSSIBLE LINKS WITH LITERACY AND NUMERACY FRAMEWORKS

#### Find and Analyse Information

Pupils should be given opportunities to:

1. discuss the purpose of their tasks, the intended audiences and the resources needed 2. find information from a variety of sources for a defined purpose 3. select suitable information and make simple judgements about sources of information 4. produce and use databases to ask and answer questions, e.g. search, sort and graph 5. produce and use models and/or

simulations to ask

questions, e.g. use a

calculate and graph

and answer

spreadsheet to

sales in a shop

#### **Problem Solving**

#### 2D & 3D Computer Modelling

Activity 1 - Pupils are able to design and amend their own 2D/3D computer models.

https://roomstyler.com/3dplanner This activity combines both 2D and 3D computer modelling. Pupils will be able to design a room of their choice adding ready-made objects to their plan including, a wide variety of furniture, electrical items, paint, flooring, doors and windows. Once they have planned their room, you can then place the 'camera' in a variety of positions to take photographs. Make sure the pupils change some of the dimensions of the room and think about how it can be improved. Is the desk to close to the door? Is the window too high to see out of? What would the walls look like if they were this colour? What happens if..? questions. Explain to the pupils that they have to design a room for a certain cost. Each object in the room will cost a different amount. What will their room look like if they spend £500, or £1000 or £5000. Take a 'print screen' of the 3D preview of the room/s. Paste it into a document and write about why you designed the room this way. Could also be a good opportunity to produce a spreadsheet of the different items and their costs.

Further examples to support modelling and simulation is used in 'real life':

BBC - Simulating an F1 racing experience

<u>Bush Fire</u> - a video demonstrating 3D modelling and simulation software that shows how bushfires spread based on a number of variables.

Further online examples of modelling and simulation:

Google Maps Driving Simulator
Parking Perfection

Design a Victorian Garden

L3 - They find information from a range of given sources and use ICT to search, sort and/or graph data to follow simple lines of enquiry. Pupils understand how changing one variable affects another in models or simulations. L4 - They use ICT to select relevant information from a range of given sources, recognising that poor quality information and data vields unreliable results. Pupils begin to check the validity of data. They add and amend records in databases. They use ICT to explore patterns and relationships. They make simple predictions about how changing one variable affects another in models or simulations. L5 - Pupils create their own databases and search or sort on more than one field to follow

#### Data and Computational Thinking - 4.2 data and information literacy

- explore and analyse data sets, highlighting relationships within them.

#### Numeracy Framework

- transfer mathematical skills to a variety of contexts and everyday situations.
- estimate and visualise size when measuring and use the correct units.
- use appropriate notation, symbols and units of measurement.
- realise that budgeting is important.
- measure and calculate perimeters

#### **Literacy Framework**

- use images, graphs and illustrations which are clear, relevant and appropriate.

## **NEARPOD**





### **HWB**

Hwb (Digital Learning for Wales)

**Hwb** is a website and collection of online tools provided to all schools in Wales by the Welsh Government.

The main site contains over 88,000 bilingual resources. In addition teachers and learners with accounts can sign in and access a range of other online tools and resources.



#### **Exploring HWB**

### Hwb

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#### **Activities**

- Explore the HWB platform and use the tools
- Use the HWB tools to create a picture, collect data, make an animation
- Use the J2e5 digital paper to create a poster
- Send an email

#### **Cracking the Code**



#### **Activities**

- Explore the world of coding and how we teach it at Llansannor
- Create algorithms
- Complete a sequence
- Use micro bit devices to create light sequences

#### What's Appening at Llansannor?



#### **Activities**

- Explore the range of apps we using in Llansannor
- Create a digital book/trailer sequence/GarageBand song
- Use the apps for inspiration

## **QUESTIONS**

# PARENT QUESTIONNAIRE AND EVALUATION FEEDBACK