Curriculum Coherence – Year 4 Computing



Values: respect, responsibility, co-operation, friendship, understanding

Prior Learning: - used technology to create and present my ideas. – create a blog and understand the pros and cons of sharing information. How to stay safe online- save their work and retrieve it again. add backgrounds, copy and paste pages, combine a mixture of text and images to share my ideas and learning, evaluate my work and improve its effectiveness, design and write algorithms, talk through code use different code blocks and commands such as 'repeat, 'timers', 'variables'. Debugging programs.

INTENT KNOWLEDGE AUDACITY

- -Evaluate an existing podcast
- -Explore the features of audacity (recording, pausing)
- -Plan a podcast (using a proforma
- -Deliver a podcast using audacity
- -Evaluate me podcast

ANIMATION

- -Understand early forms of animation in History before computers and how computers have changed animation techniques.
- Learn how to make a stick figure animation using joints and pivots.
- Create a recorded animation introducing a background and moving characters.
- -Timings of animations can be edited and effective.
- -Understand how animations are recorded and edited using different sources such as cameras and iPads.
- -Understand how stop motion animation and frame by frame filming works to create a final animation.
- -Understand how different software works and evaluate its effectiveness against other software.

CORE VOCABULARY

Animation, animate, animator, screen, frame, stop motion, sequential images, frame by frame, script, storyboard,

HIGH LEVEL VOCABULARLY

zoetrope, position, figure, background, loop, onion skins

IMPLEMENTATION

Recording a podcast

ACTIVITIES

Lesson 1 – I will evaluate a podcast

Lesson 2 – I will explore how to use audacity.

Lesson 3 – I will plan a podcast (World War/recipe)

Lesson 4- I will deliver a podcast

Lesson 5 – I will evaluate my podcast

Creating an effective animation

Lesson 1 – I will understand the history of animation. Chn explore a range of different forms of animation spanning through history. Chn create their own flip book.

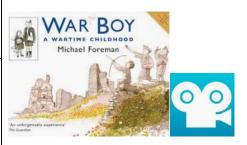
Lesson 2 – I will animate a figure. Chn tinker and explore joints, pivots and movement within a figure to create an animation which shows realistic movements.

Lesson 3 – I will create a frame by frame animation. Chn use Pivot animator to create their own frame by frame animation introducing more than one figure and using 'onion skinning' to make timely movements.

Lesson 4 – I will create a storyboard. Chn understand how important planning and storyboarding is to create an animation. Chn plan and create their own storyboard for their own stop motion animation.

Lesson 5 – I will create an animation using an app based program. Chn use cameras and a stop motion app to create their own stop motion animation. Lesson 6 - I will evaluate and edit. Chn peer and self-assess their evaluation. Chn edit their frames and timing to improve their final animations.

READING OPPORTUNITIES







IMPACT

OUTCOMES Crearing a podcast PUPILS will know

- -what a podcast is
- -how to create and deliver a podcast
- -how to evaluate a podcast.

will be able to

Use audacity to deliver a podcast
To plan and deliver a podcast

To evaluate a podcast

will understand

- -I can explore audacity
- -I can evaluate a podcast
- -I can plan and record a podcast
- -I can evaluate my podcast

Creating an animation PUPILS will know

-what an animation is

-how to animate a frame by frame stop motion animation.

will be able to

- Describe one or more types of animation.
- Use onion skinning to make slight changes to an image.
- Compare different animations and types of animation.
- Edit and refine images and frames.

will understand

- -I can create a series of linked frames that can be played as an animation.
- -I can evaluate my work and improve its effectiveness.
- -I can evaluate the effectiveness of different animation software.
- -I can make adjustments to the time and speed of my animation.

NEXT STEPS IN LEARNING

Year 5/6 Further development

SKILLS

• Real time collaborative editing

- Evaluating digital content
- Describing elements that make a successful animation
- Designing a game setting and characters to fit with a selected theme
- Uploading images or use drawing tools to create backgrounds/sprites
- Evaluating their own and others' animations to help improve their design

NC OBJECTIVES:

Pupils should be taught to:

- ♣ design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- ♣ use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- ♣ understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration

and project based learning with gaming & animation and other apps and software.

Key Questions

What is a podcast?

Can you say what you like and don't like about the podcast?

Can you tinker with audacity to create a podcast?

Can you identify an audience for your podcast?

Can you plan, deliver and evaluate your podcast?

Can you explain what animation is?

Can you explore joints, pivots and movement within a figure to create a figure animation?

Can you use the pivot animator app to create an animation?

Can you evaluate your animation?

<u>CHALLENGE:</u> Research the features of podcasts of use these in your own podcast.

Animation – I can design, create and evaluate a complex animation with multi figures.

SUPPORT: With support create a simple podcast for a identified audience.

Animation— With support I can design, create and evaluate a simple animation with one figure.

ASSESSMENT OPPORTUNITIES:

Can they plan a podcast in collaboration with others?

Can they use audacity to record a podcast for a specific audience?

Can they evaluate a podcast?

Can they tinker with audacity and explain its features?

Can they save and overwrite files?

Can they create a figure animation?
Can you tinker with pivot animator and identify its features?

Can they design and create a figure animation?

Can they evaluate a peers animation?

PREPARATION FOR ADULTHOOD:

Chn will recognise common uses of information technology beyond school i.e voice recording for podcasts and animation creation in the online world

Chn will know how podcasts can be used as a source of knowledge and enjoyment

Chn will know how to plan and deliver podcasts for a specific audience

Chn will know how to create animation to add interest to convey ideas

SMSC

Spiritual –By understanding how technology can be used to create podcasts, apps and games developing an appreciation of gaming and animation. To gain enjoyment through engagement through podcasts and animation.

Moral –Using technologies to create podcasts. An understanding of what topics podcasts should or shouldn't be recorded on. Wellbeing linked to should restrictions on podcast listening and watching animation be placed.

Social – Working with peers and making choices in collaboration peers about design and purpose.

Cultural - Promoting an understanding of the history and wonder of animation. Developments in animation crossing languages, countries and boundaries.

LINKS TO Curriculum Areas

History – Links to WW2 topic when designing their animation ideas. English – writing a script for their Morfo video, speaking clearly. Instructions writing for their game.