Coding and English Part 1
Coding & STEAM 2019

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Week 5: Coding and English Part 1

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Coding and English

— What are some ways that you could use Coding to teach English?

— Does anyone use Coding for teaching English/Literacy already?

— We will look at one approach for teaching Coding alongside Literacy today: Digital Storytelling

— Other examples include Adlib Stories and Chatbots

Digital Storytelling

— The use of computers to create and share stories

— Could use a variety of software (e.g. Powerpoint and iMovie)

— Multimodal Texts: combining images, audio, text and video

— Scratch can do all of that - and you can learn Coding at the same time as making these texts!

Digital Storytelling with Scratch

— Scratch (and other Coding tools) have been used to create digital stories

— Some resources and related research about Coding and Literacy are on the Week 5 session page

— Can create different Characters (Sprites) and create interactions between them

— Can have multiple Scenes by changing Backdrops and hiding/showing Sprites

Creative Computing: Unit 3

— Unit 3 is called **Stories**

— Focus is on "cultivating a culture that supports reusing and remixing" (from the Unit's introduction)

— Activities could be used to address Literacy elements in ACARA's General Capabilities

— Could also address outcomes from Stage 3 English syllabus: Objective A and Objective B

Creative Computing: Unit 3

— There are a lot of examples of interactive stories in Scratch, e.g. <u>History: Who is Arthur Phillip?</u>

— Also, Unit's activities will include learning about:

- **Computational Concepts**: Sequences, Events and Parallelism

- **Computational Practices**: experimenting and iterating, testing and debugging, reusing and remixing

English Part 1:

— Three activities from the Guide:

    — Conversations

    — Characters

    — Scenes

— Computational Concepts: Sequences, Events and Parallelism

Conversations

— We will start with the Conversations activity from the Stories unit of the Guide (Unit 3)

— We will come back to the Characters activity later in the session

— This activity involves using broadcast blocks

— broadcasting allows Sprites to send messages to other Sprites

Conversations: Broadcasting

— Unplugged activity

— Let's pretend that we are all Sprites

— I will broadcast a message

— Some of you will receive this message and reply to it

Conversations: Penguin Jokes

— I have created a Class Studio named **STEAM 2019 Penguin Jokes**

— You should remix the Penguin Jokes project I added to that studio

— How can you change the project to use broadcast blocks instead of wait blocks?

Conversations: Reflection Prompts

— How would you describe broadcast to someone else?

— When would you use timing in a project? When would you use broadcasting?

Characters: Custom Blocks

— In Scratch, we can define our own blocks

— We call these Custom Blocks and they are in the **My Blocks** section

— Our aim is to create a jump block

— Then change our project to make our Sprite (Pico) jump at different heights

Characters: Jumps

— I will demonstrate this activity

— You can also remix the Characters Starter Project in the Class Studio named **STEAM 2019 Characters**

— We will change the project so that this happens:

    — S makes Pico do a small jump

    — B makes Pico do a big jump

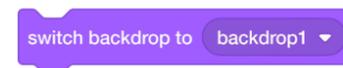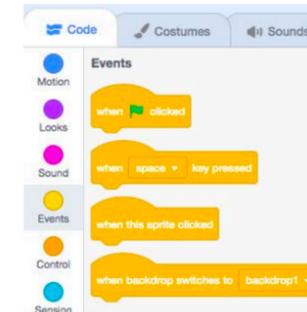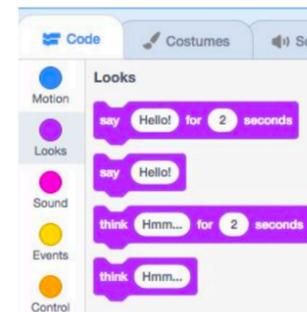   — A makes Pico do a jump for any height

Characters: Discussion Points

— What are custom blocks useful for?

— Where and when might you use them?

— Can you use the same custom block from different Sprites?

Scenes

— The last activity today is called Scenes

— Involves changing Stage backdrops to change the scene to different locations
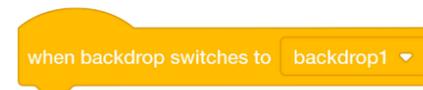
Scenes

— Start by remixing the Scenes Starter Project in the Class Studio named **STEAM 2019 Scenes**

— Feel free to change the characters and dialogue in this project to a different story

— Add some new Scenes to the project - try different backdrops

— I will demonstrate how to download and upload your own backdrops as well

Scenes: Discussion Points

— What does the Stage have in common with Sprites?

— How is the Stage different from Sprites?

— How do you initiate a Sprite's actions in a Scene?

— What other types of Projects (beyond animations) use Scene changes?