

Tackling the Technology Gender Gap Together:

‘Animate Me’ – an online Profile using Scratch

Level – Second Level

Subject area/s – Computing Science/Literacy



‘Animate Me’ – an online profile using Scratch’**Level****Second Level****Subject area/s****Technology - Computing Science and Health and Wellbeing****Experiences and Outcomes – Technology - Computing Science****Designing, building and testing computing solutions:** I can create, develop and evaluate computing solutions in response to a design challenge**Experiences and Outcomes – Health and Wellbeing**

I make full use of and value the opportunities I am given to improve and manage my learning and, in turn, I can help to encourage learning and confidence in others (HWB 2-11a)

Representing my class, school and / or wider community encourages my self-worth and confidence and allows me to contribute to and participate in society (HWB 2- 12a)

Through contributing my views, time, and talents, I play a part in bringing about positive change in my school and wider community (HWB 2-13a)

Benchmarks – Technology - Computing Science

- Creates programs in a visual programming language including variables and conditional repetition
- Identifies patterns in problem solving and reuses aspects of previous solutions appropriately for example, reuse code for a timer, score counter or controlling arrow keys
- Identify any mismatches between the task description and the programmed solution, and indicate how to fix them.

Duration of time

4 x 1 hour (depending on previous knowledge of Scratch)

Resources required

- Scratch online (<https://scratch.mit.edu/>). Please note, it is easiest to create a class within a teachers’ account on Scratch for this series of lessons. That way, the teacher can also have access to all the learners’ work.
- Access to Glow (optional)
- Computers
- Paper and pens (for mind maps) or Mind map template
- Digital camera (and lead)
- Yammer group help notes
- Help notes for opening saved documents within Scratch

Computing Science Concepts and Approaches

Tinkering
Creating
Debugging
Perseverence
Decomposition
Evaluation

Overview of learning

Primary 7 prepare their profile for transition to secondary. In this series of lessons, they will create a short animated profile using code on Scratch. These can be as complex or as simple as the pupils can manage having been shown the basic principles of coding within Scratch.

Pupil Objectives

- I can reflect on my likes, dislikes, achievements, skills and learning
- I can experiment with coding steps
- I can evaluate and debug a program
- I can create a simple animation using code

Prior Knowledge

Before these series of lessons, it is assumed that learners will have had the opportunity to 'tinker' with Scratch and the basic coding principles before starting on this project. Resources to support learners in developing these skills can be found at <https://scratch.mit.edu/info/cards>

Alternatively, use the following link to introduce Scratch if using for the first time (registration is free and easy):

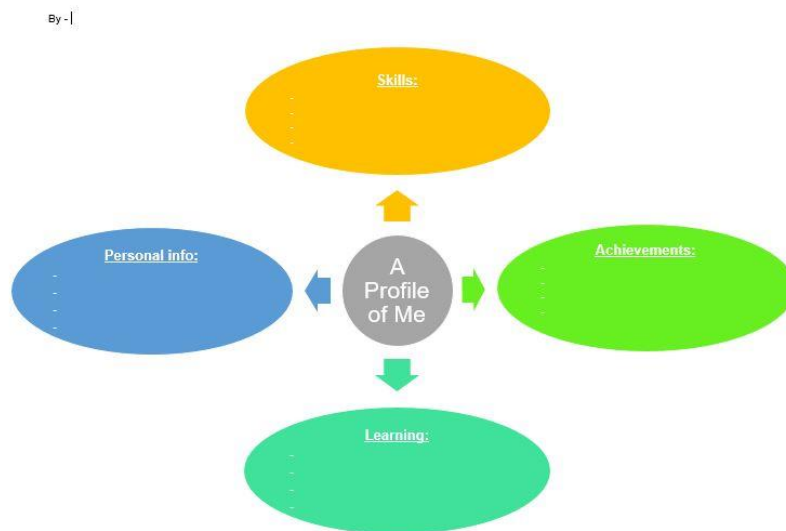
<http://barefootcas.org.uk/using-barefoot-scratch-resources/>

Introduction

Prior to this lesson, teacher / learners should have taken a digital photograph of each individual in the class. These photos can be in poses of the learners' choosing to promote individuality. The photos should be downloaded from the camera and saved in a shared area that can be accessed by the learners.

1. (10 mins) Show learners short video clip of 'What makes you incredible' https://www.youtube.com/watch?v=lmx_7k6ZvXI. This is a stimulus for discussing the fact that a profile for secondary is about selling the very 'best you', introducing yourself as a person and a learner but without the benefit of the other person being there in person to 'interview' you.
2. (5 mins) Teacher models a mindmap about themselves (please see image below) to include:
 - skills and abilities
 - achievements
 - personal info (hobbies and interests)
 - learning (strengths / areas to improve)

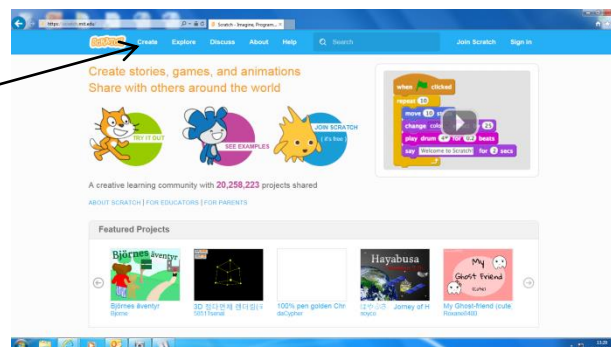
- (15 mins) Learners create mindmap to include information above that will be used as the basis for their coded animation. See suggested template below (could be completed as word doc)



Main Activity

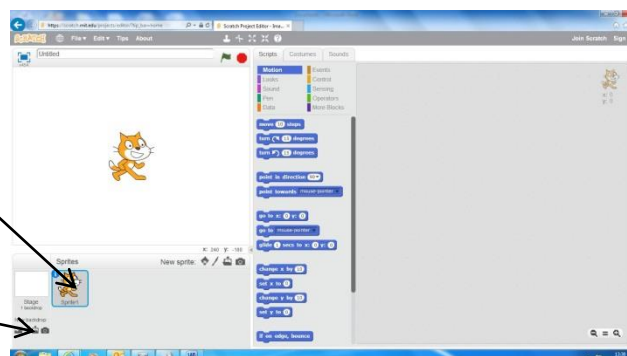
- Learners login to class area of Scratch (to create this, see <https://www.youtube.com/watch?v=7HI9GxA1zwQ>).
- Remind learners how to create a new scratch project, add a background and a sprite (of themselves). Please see images below:

Create new project

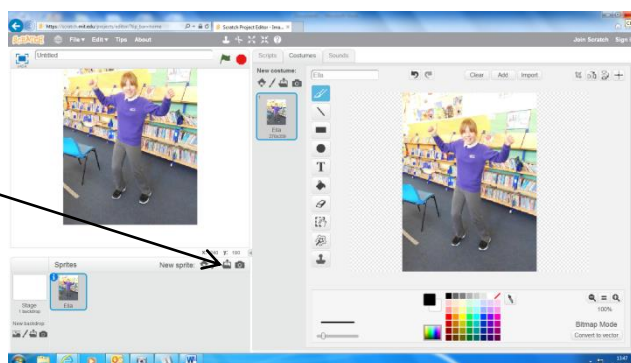


Remove Sprite by right clicking and select delete

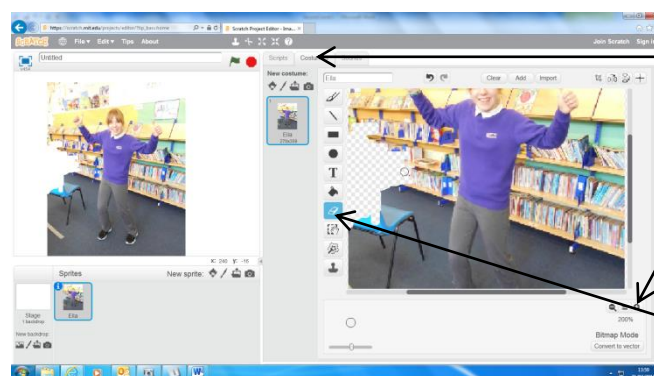
Add a background either from those provided or from a saved file



Add a new sprite
– your digital
photograph



3. Demonstrate how to remove background from the photo of their sprite

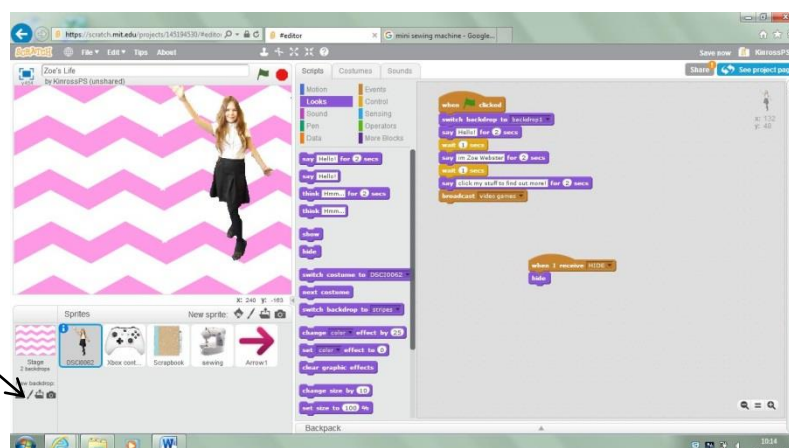


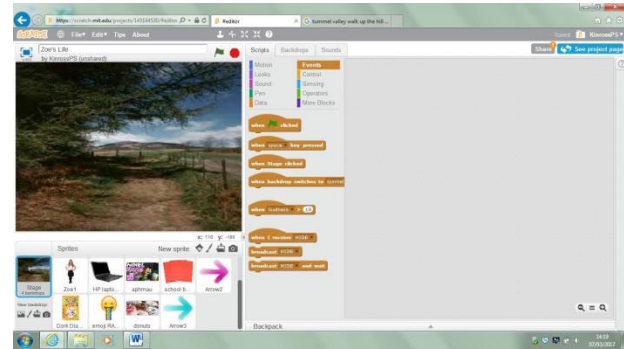
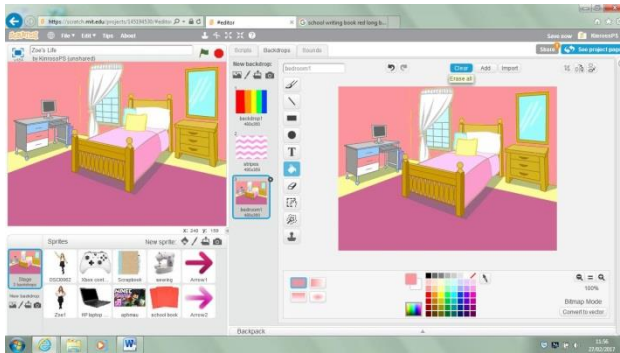
Select costumes
and then zoom in
to your photo

Then choose the
eraser tool (which
can be small or
large) to remove
the background

- Remind learners the main coding functions of Scratch, using the help cards (<https://scratch.mit.edu/info/cards>) to support with these. Learners should be given the opportunity to tinker with these coding functions, and encouraged to debug any parts of the code that don't work. It may require collaboration between learners to do this.
- Learners to refer back to their mindmap profile to include the main details within their animation.
- Learners can also use preloaded backdrops, design their own, or upload photos to create the backdrop. For more confident learners, these can be changed to different backdrops throughout the animation

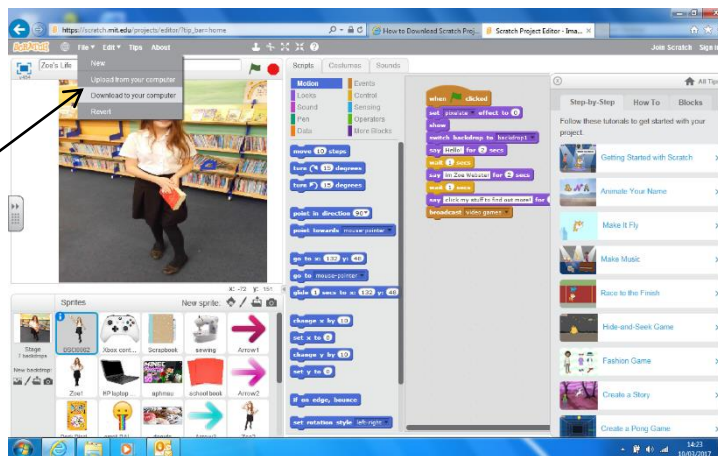
Add backdrop
either from file,
preloaded or
design their own





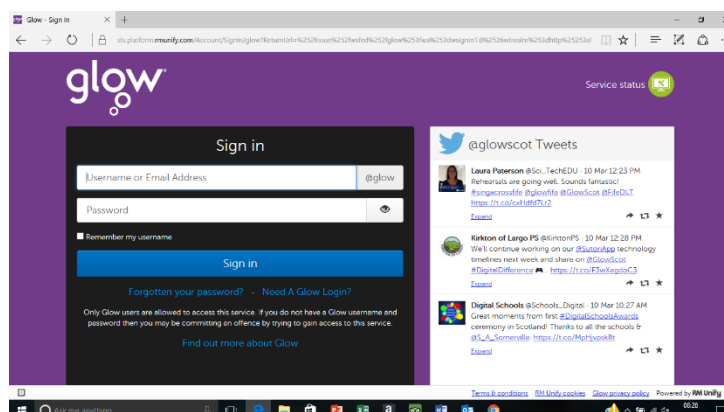
- Once complete (although this will be over a series of 3-4 lessons), learners should download their animations to be saved and played out with the closed Scratch account.

Download to
computer and
save

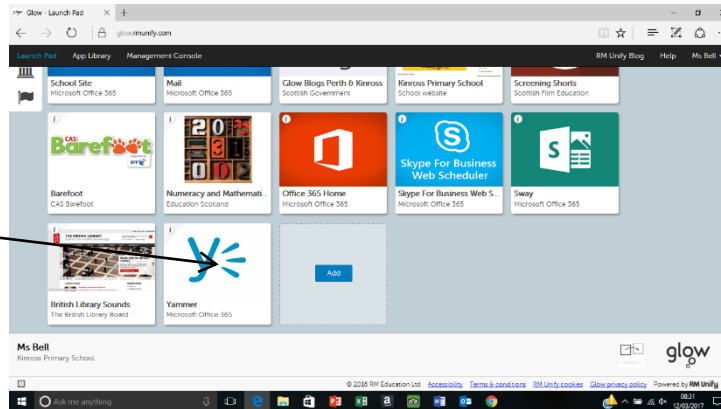


- (Optional) Completed animations to be uploaded into class GLOW Yammer group for secondary staff to access. Alternatively, they can all be saved onto a USB drive and reopened within Scratch.

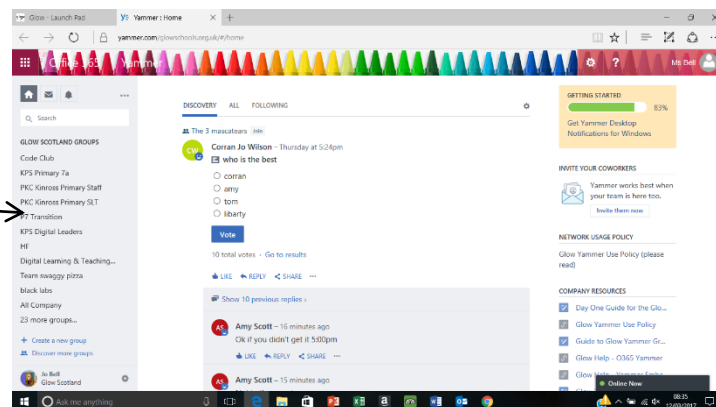
Log in to
Glow account



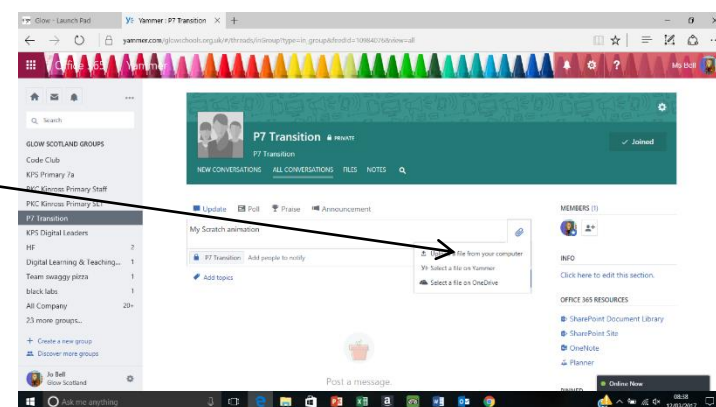
Go to Yammer



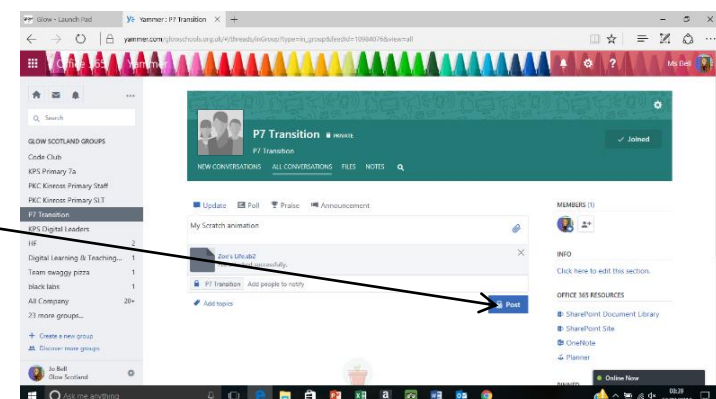
Select Yammer group



Upload Scratch project file to post



Post message to Yammer group



Plenary

Reinforce the purpose of the animation profiles are to enable learners to reflect on their skills, achievements and learning to be shared with staff at secondary school during transition. As a class, share the success of some of the completed animations, asking the following questions:

- What have you learned?
- Why was perseverance particularly important during the problem-solving process?
- What strategies did you use to debug your program?
- What did you find most challenging?

Differentiation

Depending on learners' ability or confidence, they can stick to one backdrop and limited Scratch code. For more confident learners, numerous backdrops can be added and the Scratch help cards can be used to add animated sprites.

Assessment Opportunities

Once animations have been uploaded into Yammer group by individual learners, teacher can assess and comment not only on ability to programme, problem solve and debug, but also on the content and how it reflects the individual learner in terms of profiling.

Teaching Notes

Creating a Yammer group (or using one of the other Office 365 tools) will be the easiest way for the content to be shared across establishments, which is essential as this is a transition project. Please see help notes for setting up Yammer group. Help notes are also provided for secondary staff to open the saved projects within Scratch

Examples of Profiles – Click on the text below to take you to YouTube

- [Ella Kinross Primary School](#)
- [Zoe Kinross Primary School](#)